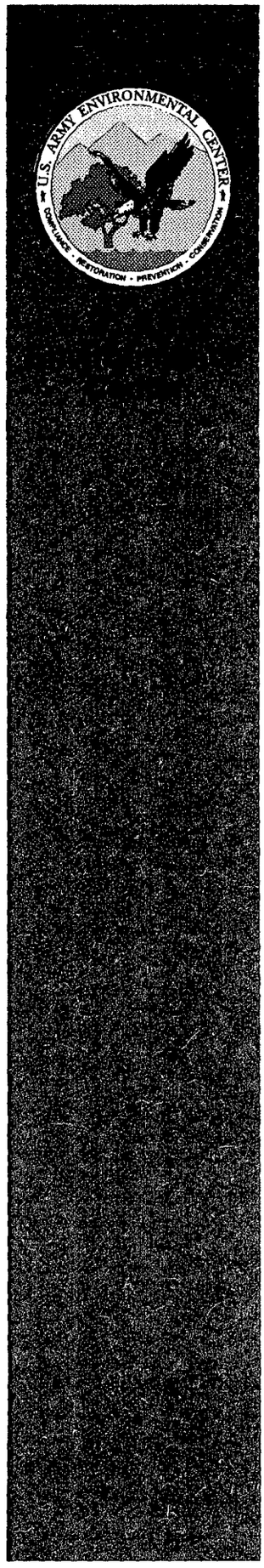


U.S. ARMY BASE CLOSURE PROGRAM

FINAL DECISION DOCUMENT

CAMERON STATION
ALEXANDRIA, VIRGINIA

NOVEMBER 1993

AEC Form 45, 1 Feb 93 replaces THAMA Form 45 which is obsolete.

AD Number	Date	DTIC ACCESSION
		20070502773

1. Report Identifying Information

A. Originating Agency

USAEC

11409 U.S. Army Base Closure Program, Final Decision Document, Cameron Station, Alexandria, Virginia

REQ

1. Pu
or
Cc
A
m
U
ir

DTIC FORM 50 JUL 96

PRE

OLETE

U.S. ARMY BASE CLOSURE PROGRAM

FINAL DECISION DOCUMENT

CAMERON STATION
ALEXANDRIA, VIRGINIA

NOVEMBER 1993

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF TABLES

LIST OF FIGURES

AEC	Army Environmental Center
ARAR	Applicable or Relevant and Appropriate Requirement
ATSDR	Agency for Toxic Substances and Disease Registry
AWQC	Federal Ambient Water Quality Criteria
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
cm^2	Square Centimeter
CSF	Oral and Inhalation Cancer Slope Factors
CTV	Critical Toxicity Value
CY	Cubic Yards
1,2-DCA	1,2-dichloroethane
1,1-DCE	1,1,dichloroethene
DD	Decision Document
DDD	dichlorodiphenyldichloroethane
DDE	1,1,dichloro-2,2-bis(4-chlorophenyl)-ethylene
DDT	dichlorodiphenyltrichloroethane
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
FS	Feasibility Study
gpm	gallon per minute
HI	Hazard Index
HQ	Hazard Quotient
ICF	ICF Technology Inc.
IRA	Interim Remedial Action
kg	kilograms
L	Liter
lb	pounds
LDR	Land Disposal Restrictions
MCL	Maximum Contaminant Level
mg	milligram

O&M	Operations and Maintenance
OU	Operable Unit
PAH	polyaromatic hydrocarbon
PCB	polychlorinated biphenyl
PRA	Preferred Remedial Alternative
PX	post exchange
RCRA	Resource Conservation and Recovery Act
RfD	reference dose
RI/FS	Remedial Investigation/Feasibility Study
RAGS	Risk Assessment Guidance for Superfund
RfC	Reference Concentration
ROD	Record of Decision
SDWA	Safe Drinking Water Act
SF	slope factors
TCDD	2,3,7,8-tetrachlorodibenzo[b,e][1,4]dioxin
TCE	Trichloroethene
TMV	Toxicity, Mobility, Volume
TPHC	Total Petroleum Hydrocarbons
μg	Micrograms
USAEC	U. S. Army Environmental Center
USEPA	U.S. Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WCFS	Woodward-Clyde Federal Services

1.1 SITE NAME AND LOCATION

Cameron Station
Alexandria, VA
Operable Units 1, 3, 4, 5, 6, and 8

1.2 STATEMENT OF BASIS AND PURPOSE

This Decision Document (DD) identifies the selected methods for remediating Cameron Station, a military installation located in Alexandria, Virginia slated for closure by September 1995. This document is issued by the U.S. Army Environmental Center (USAEC). Though this site is not a CERCLA site, the Army has chosen to perform CERCLA-style evaluations of sites slated for closure and transfer from federal government ownership. The investigations performed and documents prepared for this site have been issued generally in accordance with the CERCLA process. This DD, therefore, corresponds to a Record of Decision (ROD) that would have been issued had this actually been a CERCLA site. The information supporting the lead and support agencies' decisions on the selected remedies is contained in the administrative record.

1.3 ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this DD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

1.4 DESCRIPTION OF THE REMEDY

The installation was investigated and remedial actions were evaluated in the Remedial Investigation and Feasibility Study (RI/FS) performed from August 1990 through December 1992. Twelve Operable Units (OUs) or potential sources/areas of contamination were investigated. Only six OUs (OUs-1, 3, 4, 5, 6, and 8) were found to warrant remediation. No further action is necessary for the remaining six OUs. The response actions in this document address the principal threat at the site by treating contaminated soils and groundwater identified

at these OUs. Contaminated groundwater will be treated on-site. Contaminated residuals and soils will be disposed of off-site, such that the site will not require any long-term management subsequent to remediation. The major components of the selected remedy include:

- OU-1 Excavation of approximately 10 cubic yards of PCB and pesticide-containing material and disposal at an off-site RCRA Subtitle C landfill.

- OU-3 Soil capping and monitoring of the approximately 20,000 square foot landfill. The cap will be designed to meet the state requirements for the closure of unpermitted construction/demolition/debris landfills.

- OU-4 Excavation of approximately 20 cubic yards of pesticide-containing wastes around the Building 30 septic tank, removal of the septic tank, and disposal at a RCRA Subtitle C landfill.

- OU-5 Groundwater collection followed by air stripping and discharge to surface water (with carbon treatment of air discharge) of TCE and 1,1-DCE contaminated groundwater near Building 2.

- OU-6 Excavation of approximately 10 cubic yards of TPHC and metal contaminated soils from two acid pit locations for disposal in an off-site RCRA permitted thermal treatment facility. Metals in the ash will be solidified before disposal.

- OU-8 Groundwater collection followed by air stripping and in-situ bioremediation of BTEX contaminated groundwater near the Building 2 and the PX service station.

1.5 STATUTORY DETERMINATIONS

The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are legally applicable or relevant and appropriate to the remedial actions, and is cost effective. This remedy utilizes permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable and satisfies the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume as a

principal element. Because this remedy will not result in hazardous substances remaining on-site above health based levels, the five-year review will not apply to these actions.

Signature, Department of Environmenal Quality

Date

Signature, Military District of Washington

Date

2.1 SITE NAME, LOCATION, DESCRIPTION, HISTORY AND ENFORCEMENT ACTIONS

Cameron Station is an Army installation located within the city limits of Alexandria, Virginia, approximately 2 miles west of downtown Alexandria and 1 mile east of the Interstate 395 and Virginia Route 236 interchange in Fairfax County (Figure 2-1). The 164-acre facility is bordered to the south and east by Backlick Run and Holmes Run, respectively. These streams converge at the southeastern portion of the installation to form Cameron Run, a tributary to the Potomac River. A Southern Railway right-of-way parallels Backlick Run and separates Cameron Station from Cameron Run Valley West, an industrial area located south of the installation. The Installation is bordered to the west and northwest by mixed commercial, residential, and industrial developments. Duke Street (Route 236) forms the northern boundary of the site.

Cameron Station has not been associated with weapons manufacture, chemical or otherwise, or heavy industrial activity. The site currently serves primarily as office space for civilian employees of several governmental agencies and has a Commissary and Post Exchange serving a large active and retired military population. Cameron Lake, consisting of interconnecting North and South Ponds, is located in the eastern portion of the site.

Service and storage facilities comprise about 40 percent of the total land use. Administration and community facilities make up about 26 percent and 11 percent of the land use, respectively. Recreational use covers 23 percent and medical use is less than 1 percent of the installation. The post includes 29 permanent buildings totaling 1,299,871 square feet, and four temporary buildings totaling 9,444 square feet. Cameron Station is primarily an administration facility. Most of the warehouse space has been converted to office space or commissary and PX facilities. The primary site features are shown on Figure 2-2.

Alexandria had a population of approximately 109,000 in 1988 (USACE, 1991). In 1985, about 61,000 people lived within a 2-mile radius of the installation. The Landmark-VanDorn planning area surrounding Cameron Station contains almost 1,065 acres, of which 25% is residential, 25% is industrial, 10% is parkland or vacant land, and the remainder is in office or retail use. The Cameron Station site was originally wetlands. The topography of Cameron Station now

ranges in elevation from about 45 to 85 feet above mean low water (ICF, 1990a). As a consequence of grading and of the construction of storm water drainage structures, approximately 97 percent of the site is now within the 100-year floodplain.

CAMSTA occupies land that was part of a vast pre-Revolutionary estate belonging to the Right Honorable Thomas Lord Fairfax, Baron Cameron. Gradually, the land was divided into smaller farms and mills. Soon after the beginning of World War II in 1942, 12 tracts of land consisting of approximately 164 acres were deeded to the government by purchase and condemnation for a general depot. The original designation of the installation was the Alexandria Quartermaster Depot, a Class II installation operated by the Quartermaster General. One of the responsibilities of the Quartermaster Department, dating back to 1869, was the operation of commissaries and PXs. In 1950, control of the facility was transferred to the Military District of Washington (MDW), and the depot was redesignated Cameron Station. In 1954, it became a permanent Department of the Army installation. Most of the warehouses were divided into office space in 1962, and the headquarters of the Defense Supply Agency (later redesignated the Defense Logistics Agency) was established at the installation. With the 1971 reorganization of the MDW, the post staff was eliminated and most of the MDW functions were moved to CAMSTA. Review of historical aerial photographs over the period 1949 to 1966 revealed that Cameron Station was surrounded by a rural/suburban environment in 1949. At that time, the majority of the site structures described above were present, with the exception of Building 23. Cameron Lake did not appear in the 1949 photograph, nor was there any evidence of base activity south of Backlick Run. Cameron Lake appears in the 1966 photograph as two adjacent but separate ponds. At that time activity is evident south of Backlick Run in the area now referred to as the "Landfill". The 1966 photograph also shows both the present PX service station (Building 23) and the previous PX service station, which was located north of Building 1.

Several investigations into environmental quality have been performed at Cameron Station during its history. Some of these studies were performed as a routine management action, and some were in response to a specific event (e.g., a spill). Each of the following such studies are summarized in detail in the RI Report.

A Solid Waste Management Consultation (No. 26-0466-77) was conducted at CAMSTA in September 1976 by the U.S. Army Environmental Health Agency (USAEHA) to evaluate the disposal of pesticide rinsewater and to investigate the possibility of groundwater and soil contamination from septic tank disposal operations. In July 1977, an Installation Pest

Management Program Survey (IPMPS No. 61-0540-78) was conducted by the USAEHA to evaluate the installation pest management program. An Installation Pest Management Program Review (No. 16-61-0535-82) was conducted in January 1982 by USAEHA to examine the existing pest management program. The primary emphasis of the review was on the program's health, safety, and procedural aspects as well as on specific areas identified in the IPMPS of July 1977. A Pesticide Monitoring Survey (No. 17-44-0252-85), was performed in September 1984 by USAEHA to evaluate the distribution of pesticides in several land use areas and major surface water systems. In May 1989, USAEHA conducted a Pesticide Risk Management Consultation (No. 17-38-0026-89) to investigate pigeon problems in and around Building 21.

In July 1983, a Hazardous Waste Management Survey (No. 37-26-0304-84) was conducted by USAEHA to review management of hazardous waste relative to the requirements of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, and applicable State and local requirements. An installation assessment of CAMSTA was conducted in 1984 by Environmental Science and Engineering (ESE, 1984) for the Army Environmental Center. The purpose of this assessment was to determine the presence of any toxic or hazardous materials and to assess the potential for off-post migration. The investigation consisted of a records search, interviews with current and former employees, and an on-site investigation of environmentally significant areas. An enhanced Preliminary Assessment of CAMSTA was performed and a report prepared in 1989 by Argonne National Laboratory for the Army Environmental Center. The purpose of the assessment was to address all documented or suspected incidents of actual or potential releases of hazardous or toxic constituents to the environment. The investigation consisted of a review of property files, interviews with employees, a site visit, and direct observation.

On August 30, 1979, a PCB spill occurred at CAMSTA in front of Door #17 outside of Building 9. Approximately three gallons of PCB fluid spilled from a damaged transformer onto a wooden truck bed and the underlying asphalt parking area. The spill was cleaned up, and the asphalt in the spill area removed. In June 1989, approximately 30 gallons of diesel fuel were spilled between Buildings 5 and 6. Much of the fuel ran into storm sewers 140, 143, and 163 which drain into Backlick and Cameron Runs. The Alexandria HAZMAT team contained much of the spill, but before cleanup was completed, a rainstorm washed the remaining fuel down Cameron Run. Several spills of gasoline have reportedly occurred at the PX Service Station (Building 23) over time. No documentation of individual spills is available. Base personnel indicate that on several occasions, tank overfills resulted in small releases (up to 50 gallons). Additionally, facility personnel reported that at least one fiberglass tank required repair some time in the 1980s

after the tank bottom was found to be punctured. Details of the leak, such as the duration, quantity, amount of material recovered, etc., are not known. Early in the RI, free-phase petroleum product and dissolved petroleum contamination of groundwater was discovered at the PX service station, and a limited amount of free product was observed at a No. 2 fuel oil tank at Building 2. In June 1991, an Interim Remedial Action (IRA) was initiated to address this problem in accordance with Virginia Regulation 680-13-02, Sections 6.4 and 6.5. A Site Characterization Report and Corrective Action Plan have been submitted to the state in accordance with Virginia regulations.

2.2 HIGHLIGHTS OF COMMUNITY PARTICIPATION

The Proposed Plan was distributed to solicit public comments regarding the proposed remedial alternatives for contaminated soil and groundwater at Cameron Station. USAEC relies on public input so that the remedy selected for the site meets the needs and concerns of the local community. To assure that the community's concerns were addressed, a public comment period was in effect from March 4 through May 3, 1993 and the opportunity for a public meeting to be held in the community was offered. The community did not request such a meeting. It is important to note that although USAEC selected preferred alternatives in the Proposed Plan, no final decision was made until after the comment period ended and all comments were considered. The Army solicited comments on all remedial alternatives evaluated in the FS and summarized in the Proposed Plan. Comments received are presented and responses provided in the Responsiveness Summary (Section 3.0) of this document.

2.3 SCOPE AND ROLE OF THE BASE CLOSURE RI/FS

The U.S. Army Environmental Center (USAEC) performed a Remedial Investigation and Feasibility Study (RI/FS) at Cameron Station in support of the base-closure process. It should be noted that Cameron Station is not a Superfund site. The Army has chosen to perform CERCLA-style evaluations of sites slated for closure and transfer from federal government ownership, however, and therefore the RI/FS was performed generally in accordance with the CERCLA process.

The RI/FS was performed from August 1990 through December 1992. Twelve OUs, or potential sources/areas of contamination, were investigated at Cameron Station. Each OU was investigated during the RI to define the nature, magnitude, and extent of any environmental

contamination. Information obtained from the RI was used during the FS to assess the health and environmental risks associated with closure and transfer of the base; to determine the necessity for remedial actions; and to develop and evaluate remedial action alternatives.

Based on the results of the RI/FS, only six OUs (OUs-1, 3, 4, 5, 6, and 8) were found to warrant remediation. A Proposed Plan, which contains remedial alternatives considered and identifies preferred alternatives, was prepared and made available for public comment.

The information repository that contains the RI and FS reports, the Proposed Plan, this Decision Document, and supporting documentation is available at the following location:

Alexandria Library
Ellen Coolidge Burk Branch
4701 Seminary Road
Alexandria, Virginia 22304

A glossary of terms that may be unfamiliar to the general public is provided in Appendix A.

2.4 SUMMARY OF SITE CHARACTERISTICS

This section provides an overview of each of the six operable units to be remediated. The following is a brief discussion of contaminants of concern, concentrations of contaminants, and media affected at each of these operable units. Descriptions of risks and routes of human and environmental exposures are presented in Sections 2.5, 2.6 and 2.7.

2.4.1 Operable Unit 1 - PCB Transformers

The use, storage and past spill of PCB transformers at Cameron Station have not resulted in widespread contamination. Based on the results of the Remedial Investigation, only highly localized, very low-level PCB contamination (1.24 mg/kg) of asphalt exists behind Building 9 (sample PCB 095). Although PCBs were detected (up to 55.04 $\mu g/100\ cm^2$) in the asphalt at the location of the spill documented at Door 17 of Building 9, no PCBs were found in the soil beneath the asphalt. The highest level of PCBs detected on the asphalt (55 $\mu g/100\ cm^2$ is less than the regulatory level for surficial contamination in restricted areas (100 $\mu g/100\ cm^2$) such

as the fenced area behind Building 9. This exceeds the unrestricted-access area standard of 10 $\mu g/100\ cm^2$, however.

Although asphalt at the storage areas may contain some PCBs, detection of only 1.24 mg/kg PCB in only one of the fifteen asphalt samples taken suggests only highly localized low concentrations of PCB. The detection of 2.12 mg/kg PCBs in surficial soils just off the asphalt storage area is further evidence that significant PCB contamination does not exist in this area (the regulatory level for cleaning up spill-contaminated soil is 10 mg/kg). Finally, significant PCB contamination was not found at pole or platform transformer locations by detecting PCBs in only four soil samples, all at levels less than 1 mg/kg. Although significant PCB contamination does not exist, remediation is being proposed since the site will be made available for unrestricted use.

2.4.2 Operable Unit 3 - Landfill

The results of the investigation into the landfill operable unit (OU) do not suggest widespread contamination of the subsurface soils or groundwater. Visual observations during the RI indicate that wastes normally associated with sanitary landfills (paper, household food wastes and debris, glass bottles and metal cans) are not present at the locations investigated. Methane gas was not observed during landfill boring activity. Furthermore, no leachate seeps have been observed at any time along the banks of the landfill at Backlick or Cameron Runs.

The soil within the interpreted limits of the landfill was found not to contain the majority of constituents analyzed. Only cadmium (at 1.17 mg/kg) and silver (at 5.71 mg/kg) in one sample exceeded the common range of concentrations for natural soils. This sample also contained a number of PAHs that totaled approximately 630 mg/kg and are attributed to wooden debris encountered at the depth of that sample. The isolated detections of PAHs in the landfill soil borings indicate that these compounds are not uniformly distributed in the fill. Both the metals and the PAHs appear to be relatively immobile under the conditions encountered as evidenced by the absence of PAHs, silver and cadmium in groundwater sampled from each well in this OU. Some metals were observed in shallow groundwater at greater than ambient conditions, but the deep groundwater is not impacted. Although widespread contamination was not identified, remedial action consisting of capping the landfill is being proposed to minimize the potential for future impacts to groundwater.

2.4.3 Operable Unit 4 - Pesticides Use and Storage Areas

Pesticides and their associated by-products (dioxins) are present in soil, sludge and groundwater at the site. In some locations, the concentrations of pesticides are very low, reported at levels just above the detection limits. Results for soils as well as PCB wipes analyzed for pesticides show low levels (less than 1 mg/kg) of these chemicals across the site. This would be expected where the chemicals have been routinely applied. It is likely that similar concentrations exist in soils in surrounding off-site areas where similar products are applied.

Only two localized areas of elevated pesticides have been identified: The area behind Building 9 at Door 17, where DDT ranged up to 35 mg/kg (sample PCB 09S5) in soil beneath asphalt; and the area near Building 30 where DDT was reported at 12 mg/kg (samples SB13). The concentration of a pesticide in groundwater (heptachlor at 0.016 μg/L) exceeds the state standard (0.001 μg/L), but only slightly, at the location of the Building 30 septic tank.

The concentrations of dioxins in soils detected across the site are not unexpected given the history of pesticide application. The levels of dioxins present in the fence line soil samples SOFL13, SOFL14, SOFL19 and SOFL21 are elevated compared to the other site concentrations and reported urban-area concentrations. The level of 2,3,7,8-Dioxin detected in the fence line samples (up to 0.9 μg/kg) is lower than the cleanup level set by U.S. EPA Region VII for dioxin contaminated Superfund sites (1 μg/kg).

The presence of the Building 30 septic tank creates the potential for contaminant releases to the groundwater to occur, as evidenced by the presence of the pesticides in groundwater in this area.

2.4.4 Operable Unit 5 - Sanitary and Storm Sewer Systems

The contents of some sewer system features, such as the Building 5 sludge tank and Building 9 grease trap, represent potential sources of contamination if demolition of the sewer systems causes releases to the environment. Sludge tanks and grease pits in the sewer system have been cleaned out since the RI was conducted. The presence of TCE in the storm sewer water and the storm sewer outfall into Cameron Lake may have been caused by past discharges from Cameron Station activities, however the discharges have ceased.

Solvent contaminated groundwater (primarily TCE) was found in MWS15 in concentrations as high as 500 μg/L near Building 2. The level of TCE exceeds the MCL of 5 μg/L. Other contaminants, including 1,1-DCE which exceeds its respective MCL, are also present in the groundwater at this location.

A separate area of benzene and 1,2-DCA in groundwater was identified extending across the site from the western property boundary eastward approximately to Building 7. Detected levels of benzene ranged up to 800 μg/L in this area (MWS26) which exceeds the MCL of 5 μg/L. The source of this contamination appears to be off-site, based on the ground water flow direction and the existence of this contamination at the upgradient property boundary. An alleged release from an underground storage tank located upgradient from Cameron Station is a possible source of this contamination, although no details concerning the potential off-site source have been made available by cognizant regulatory agencies. Remediation of contamination apparently originating off-site was not addressed in the FS because the source of contamination is beyond the Army's control, and remedial alternatives cannot be identified, screened or analyzed without first defining the source conditions. The installation has notified state and Federal agencies of this situation and will cooperate in efforts as required. Any potential future cleanup that may be required for this contamination will be addressed in a separate ROD.

2.4.5 Operable Unit 6 - Acid Pits

Petroleum waste may have been placed in the acid pit located at Building 23, the PX service station, however it is difficult to evaluate this due to widespread contamination at that site caused by the releases from the fuel tanks. At Building 9, the results from the acid pit soil sample indicate disposal of petroleum as well as lead-containing wastes. The effects of the acid pit disposal, however, appear to be isolated since no chemical contamination was detected in MWS12, located less than 50 feet downgradient from the Building 9 acid pit. TPHCs were found at up to 21,000 mg/kg, and lead at of 4,200 mg/kg.

2.4.6 Operable Unit 8 - PX Service Station and Building 2 Underground Storage Tanks

The RI and subsequent Interim Remedial Action (IRA) have identified significant soil and groundwater contamination at the PX service station from releases of petroleum products. Petroleum product was observed floating in the groundwater surface in thicknesses ranging up to several feet at some locations. The heterogeneous nature of the fill soils in this area and the

likelihood that more than one significant petroleum release has occurred over time explains the irregular distribution of product in the subsurface. The PX Service Station has been closed; all USTs have been emptied and are being removed. Based on evaluations in the RI Report, the product is estimated to be present over an area of approximately 80,000 square feet extending from the PX Service Station south across Parking Lot 2. A very localized occurrence of No. 2 fuel oil is present in the immediate vicinity of the Building 2 UST. The area of petroleum product in the soil at Building 2 is estimated at less than 400 square feet. The Building 2 UST and surrounding soil has been excavated and disposed off-site.

The IRA was initiated in June 1991 to comply with Virginia Regulation 680-13-02, Sections 6.4 and 6.5. The IRA included additional site characterization studies and efforts to remove petroleum hydrocarbons from the subsurface. IRA activities are being performed in concert with the RI/FS activities.

Several monitor wells installed within the PX service station have been used as petroleum product recovery wells. Approximately 2,000 gallons of product have been recovered to date. Product recovery through recovery wells and soil vapor extraction were cleanup remedies implemented at the PX Service Station in 1991-1992 as part of the IRA.

Groundwater contamination has resulted from petroleum releases at the PX service station USTs. Concentrations of benzene up to 2,800 μg/L exceed the MCL of 5 μg/L throughout an estimated area of approximately 150,000 square feet. The contamination does not extend to the downgradient property boundary. Groundwater may have been impacted in the vicinity of the Building 2 UST, however, chemicals of concern (BTEX) have not been detected at monitor well B2-1 located 75 feet downgradient from the UST. Clay soils underlying the tank appear to have minimized the impacts of this release.

2.5 SUMMARY OF SITE RISKS

2.5.1 Risk Assessment

No noncancer health effects are expected from exposure to potentially site-related chemicals. However, exposure to site-related chemicals may result in excess cancer risks in exposed populations. These risks are likely to be overestimated due to inherently conservative

assumptions in the risk assessment. Cancer risks are very small numbers, so they are expressed in exponential notation, i.e., a one in a million cancer risk is stated as a risk of 1×10^{-6} or 1E-6.

The excess cancer risk to current children eating fish from Cameron Lake could be as high as 4E-5. This risk is due almost entirely to PCB-1260 (3E-5), with smaller contributions from dioxins (1E-5) and gamma chlordane (1E-6) in fish. The Food and Drug Administration's tolerance level for PCBs in fish is 2 mg/kg, approximately ten times the level detected in Cameron Station fish. Cancer risk estimates may also be high based on the assumption that the child eats sixty percent of two, three-pound fish (all of the edible portion of each fish he or she catches).

Current maintenance workers that come in contact with fenceline soil containing dioxins may experience an excess cancer risk as high as 2E-6 from dermal contact with this soil.

Future child residents may experience excess cancer risk as high as 7E-5. This population may experience a cancer risk from fish consumption (4E-5) similar to that of current child visitors that eat fish caught during the Cameron Lake fishing derby. Future adult and child residents may also experience risks as high as 3E-5 through ingestion of contaminated yard soil. Beryllium, dieldrin, dioxins, heptachlor, and PCB-1260 are the primary sources of this cancer risk. Dioxins and PCB-1260 are estimated to pose a total excess cancer risk of 6E-6 in future child residents exposed to yard soil by the dermal route.

Ingestion of soil during visits by future child residents to the landfill may results in an excess cancer risk as high as 1E-6 from exposure to beryllium and benzo(a)pyrene.

Future resident adults may experience an excess cancer risk as high as 3E-5 from ingestion and dermal contact with contaminated yard soil. Most of this risk is contributed by dioxins through dermal contact with soil.

Beryllium appears to be present in soil at concentrations that represent ambient conditions. Therefore, it is uncertain that risks due to exposure to beryllium in soil are site-related. All other estimated excess cancer risks appear to be site-related.

Although the baseline risk assessment was done in a conservative manner, and the above risks were identified, remediation would not be required by USEPA under current guidelines for a

Superfund site. Risks in the range of 1E-4 to 1E-6 are considered by the EPA risk managers, taking into account site specific factors, but they do not warrant remediation. Risks greater than 1E-4 require remediation. On this basis, no risk-driven remediation of the site is warranted.

2.5.2 Ecological Assessment

An ecological assessment focussing on aquatic environments found significant aquatic resources in Cameron Lake and possibly the adjacent surface water features. No rare, threatened, or endangered species or suitable habitat for these species were found to be present on Cameron Station. Levels of some metals and PAHs in Cameron Lake sediment, and some metals in Cameron Lake and adjacent surface waters, could cause adverse effects on aquatic biota. Fish in Cameron Lake were found to contain some potentially site-related compounds; however, this represents very low levels of uptake from sediments by fish. The adjacent surface water and sediment quality is likely due to upstream sources and not site releases. Areas where significant ecological resources exist are not likely to be adversely impacted by planned future site uses. The ecological assessment did not identify the need for any remediation.

2.6 HUMAN HEALTH RISKS

2.6.1 Introduction

A Baseline Risk Assessment was prepared to analyze the potential adverse human health effects (current and future) resulting from exposures to site-related chemicals found at Cameron Station. The full risk assessment was presented as Chapter 6 of the document entitled Cameron Station Remedial Investigation Draft Report, August, 1992. The procedures used in this risk assessment were consistent with USEPA guidance, the Risk Assessment Guidance for Superfund, Volume - Human Health Evaluation Manual (RAGS) (USEPA 1989a) and supplemental guidance (USEPA 1991b), the Guidance for Data Useability in Risk Assessment (Part A) (USEPA 1990), the Exposure Factors Handbook (USEPA 1989b), and the Superfund Exposure Assessment Manual (USEPA 1988b).

The location, description, and history of the Cameron Station site are presented in Section 2.1. Features of the site pertinent to the risk assessment are shown in Figure 2-2. Characteristics of the physical setting of the site relevant to potentially exposed populations are presented in the Exposure Assessment section below.

Activities performed in support of the Cameron Station RI included a site reconaissance, geophysical surveys, soil gas surveys, UST integrity testing, an asbestos survey of buildings, an assessment of PCB transformers, studies of sanitary and storm sewers, a survey of biological contamination from pigeon roosting, and sampling and analysis of environmental media.

2.6.2 Chemicals of Potential Concern

Surface and subsurface soil, groundwater, surface water, sediment, and fish tissue were the media of concern at Cameron Station.

The following conservative process was applied to select the eighty-one chemicals of potential concern presented in Table 2-1:

- As a general rule, any chemical detected at least once in any sampled medium where human exposures or releases to the environment may occur was considered a candidate chemical of potential concern.

- Comparison of sample concentrations with background concentrations was not used to select chemicals of potential concern. However, beneficial minerals (iron, calcium, zinc, etc.) were excluded if the estimated intake from site media did not exceed the National Research Council's health criterion. Also, essential nutrients that had available inhalation reference doses or slope factors (hexavalent chromium) were retained as chemicals of potential concern. Any unacceptable risks they may contribute were evaluated as an uncertainty in the risk assessment.

- Laboratory artifacts or chemicals determined to be blank contaminants unrelated to known site activities were not selected as chemicals of potential concern if the rules outlined above were satisfied.

Exposure point concentrations of the chemicals of potential concern on which the risk assessment was based are presented by environmental medium and exposure point in Appendix B.

2.6.3 Exposure Assessment

Exposure scenarios used for estimation of human risk at Cameron Station are presented in Table 2-2.

For purposes of the exposure assessment, the Cameron Station site was defined as the area within Cameron Station property boundaries, the segments of Holmes and Backlick Runs adjacent to the property, and Cameron Run down to the most distant location where samples were collected for the RI.

A landfill is present on the southern side of the site and is considered a part of the site. Currently, it is mostly unvegetated and represents a potential source of exposure to airborne soil particles at the landfill or at locations downwind of the landfill due to wind erosion. Another potential source of airborne soil particles is an unpaved road located along the west and southwest boundaries of the site used by service vehicles and cars driven by site visitors. The surface of this service road may contain residue from fly ash or road oil of unknown chemical concentration or origin.

An area around Building 23 (PX service station) where TPHC contamination is present in subsurface soil is likely to be a source of airborne releases of VOCs commonly associated with TPHC.

On-site areas where visitors are most likely to come in contact with potentially contaminated environmental media by one or more exposure routes include the following:

- Cameron Lake
- Streams
- Ball field
- Picnic grounds
- Jogging trail

The commissary, the administration building, and the various offices on the site are areas that are accessible to visitors but are not areas where exposures to contaminants are probable. The site history of these areas suggests that they have not been impacted by previous chemical releases. These areas are also upwind from major site sources.

Several site areas were found to be impacted by site chemicals but, due to their remote location or limited accessibility, were not judged to be significant areas where human exposure could potentially occur under the current and future land use scenarios. These included covered acid pits, septic tanks and ash piles.

The on-site lake (Cameron Lake) and streams near the site (Backlick Run, Holmes Run and Cameron Run) are areas where children may wade and play. Surface water and sediments in these areas may contain chemicals released from the site.

Activities by maintenance workers could lead to direct exposures to chemicals in the identified areas. Areas of potentially contaminated soil near Building 30 and along fencelines are potential exposure points for these maintenance workers.

Future use of the site is planned to alter the current physical setting of the northern area of the site. Land use in areas where buildings are presently located is planned to switch from commercial/light industrial to residential. Contaminated soils in some of these areas where exposures do not occur now may become yards and recreational areas where human exposure to contaminants in soil can occur in the future. The potential for VOC releases to the air from subsurface soil and groundwater contamination could increase as a result of removal of overlying pavement and buildings.

Several areas associated with the site are not planned to change under site reuse. On-site recreational areas are planned to remain unaltered due to their present location in the flood plain of surrounding streams and the high land use priority placed on recreational use of those areas. No specific plans are available for a different use of the landfill area. However, it is unlikely that the landfill will be used as a site for construction of residential homes or commercial buildings because of its location near the railroad tracks. Due to natural site topography and the lack of alternative channels for transporting runoff, it is also likely that the current status of streams adjacent to the site will not change.

Chemical emission and air dispersion modeling were performed for specific areas where there were known sources of contaminants and where releases of contaminated soil particles or volatile organic compounds to air from contaminated soils and groundwater were likely to occur. Particulate emissions were considered likely to occur from bare, unvegetated, erodible, contaminated surface soils and VOC emissions were considered likely to occur from areas that are not covered by buildings, concrete, or asphalt where surface and subsurface soils or groundwater were contaminated with VOCs. The first type of area occurred at the landfill, the service road, and soil near Building 30. The second type of area included the area near Building 23 where subsurface TPHC contamination exists and the two areas where groundwater is contaminated with trichloroethylene, benzene, and other VOCs under a planned future housing area.

Only very small soil particles are inhaled and retained in the lungs and are a concern as a health risk (USEPA 1989a). These are referred to as "PM10" particles or particles with an aerodynamic diameter of 10 microns or less. Releases and ambient outdoor air concentrations of contaminated PM10 particles from bare, unvegetated, erodible, contaminated surface soils were estimated for wind erosion and vehicle traffic disturbances using the method of Cowherd et al. (1985) and a simple box (Hanna et al. 1982) or Gaussian plume model (Turner 1970, USEPA 1988b).

Emissions of VOCs to air from TPHC-contaminated soil were conservatively estimated using the Shen soil volatilization model (Shen 1981). Emissions of benzene and trichloroethylene to air from groundwater were estimated using a model developed by USEPA for Resource Conservation and Recovery Act (RCRA) facility investigations (USEPA 1989c). A simple box (Hanna et al. 1982) or Gaussian plume model (Turner 1970) was used to conservatively estimate exposure point concentrations for VOCs using model emission estimates and local wind speed.

Exposure time, frequency, and duration terms used in the Cameron Station exposure assessment are presented in Tables 2-3 (inhalation terms) and 2-4 (ingestion and dermal contact terms).

2.6.4 Toxicity Assessment

Oral and inhalation cancer slope factors (CSFs) have been developed by EPA's Carcinogen Risk Assessment Verification Endeavor (CRAVE) Work Group for estimating excess lifetime cancer risks associated with exposure to potentially carcinogenic chemicals. CSFs, which are expressed

in units of $(mg/kg\text{-}day)^{-1}$, are multiplied by the estimated intake of a potential carcinogen in mg/kg-day to provide an upper-bound estimate of the excess lifetime cancer risk associated with exposure at that intake level. The term "upper bound" reflects the conservative estimate of the risks calculated from the CSF. Use of this approach makes underestimation of the actual cancer risk highly unlikely. CSFs are derived from the results of human epidemiological studies or chronic animal bioassays to which animal-to-human extrapolation and other uncertainty factors have been applied.

In addition, EPA assigns a cancer weight-of-evidence category to each chemical in order to reflect the overall confidence that the chemical is likely to cause cancer in humans. These categories and their meanings are summarized below.

Category	Meaning	Basis
A	Known human carcinogen	Sufficient evidence of increased cancer incidence in exposed humans.
B1	Probable human carcinogen	Limited human data are available.
B2	Probable human carcinogen	Sufficient evidence of increased cancer incidence in animals, but lack of data or insufficient data from humans.
C	Possible human carcinogen	Suggestive evidence of carcinogenicity in animals.
D	Cannot be evaluated	No evidence or inadequate evidence of cancer in animals or humans.

Oral reference doses (RfDs) and inhalation reference concentrations (RfCs) have been developed by EPA's RfD/RfC Work Group for indicating the potential for adverse health effects from exposure to chemicals exhibiting noncarcinogenic effects. RfDs, which are expressed in units of mg/kg-day, and RfCs, which are expressed in units of mg/m^3, are estimates of exposure

levels for humans, including sensitive individuals, that are likely to be without an appreciable risk of noncarcinogenic, deleterious effects during a lifetime. Estimated levels of exposure to a chemical in environmental media (e.g., the amount of a chemical ingested from contaminated drinking water) can be compared to the RfD or RfC. RfDs/RfCs are derived from human epidemiological studies or animal studies to which uncertainty factors have been applied (e.g., to account for the use of animal data to predict effects on humans). These uncertainty factors help ensure that the RfDs/RfCs will not underestimate the potential for adverse noncarcinogenic effects to occur.

Table 2-5 summarizes the carcinogenic effects and slope factors and Table 2-6 summarizes the noncarcinogenic effects and critical toxicity values for contaminants of potential concern at Cameron Station.

2.6.5 Risk Characterization

Appendix C presents carcinogenic and noncarcinogenic risks by chemical for each exposure medium and pathway and summarizes total pathway risk.

Noncarcinogenic Effects

Potential concern for noncarcinogenic effects of a single contaminant in a single medium is expressed as the hazard quotient (HQ), which is the ratio of the estimated level of exposure derived from the contaminant concentration in a given medium to the contaminant's RfD or RfC. By adding the HQs for all contaminants within a given medium or across all media to which a given population may reasonably be exposed, the Hazard Index (HI) can be generated. The HI provides a useful reference point for gauging the potential significance of multiple contaminant exposures within a single medium or across media.

No HIs exceeded 1.0 for any population at the Cameron Station site. Therefore, no noncancer health effects are expected from exposure to potentially site-related chemicals.

Carcinogenic Risks

Excess lifetime cancer risks are determined by multiplying the intake level by the cancer slope factor. These risks are probabilities that are generally expressed in scientific notation (for example, 1 x 10^{-6} or 1E-6). An excess lifetime cancer risk of 1 x 10^{-6} indicates that, as a plausible upper bound, an individual has a one in one million chance of developing cancer as a result of site-related exposure to a carcinogen over a 70-year lifetime under the specific exposure conditions at a site.

Table 2-7 presents estimated total cancer risks for each population exposed at a sub-location of Cameron Station where at least one pathway-specific risk is likely to be 1E-6 or greater.

Under current land use conditions, only two populations are subject to potential increased cancer risk due to exposure to contaminated environmental media at Cameron Station. Maintenance workers exposed to fenceline soils may be subject to an increased excess cancer risk of 2E-6 as a result of dermal exposure to dioxin-contaminated soils in this area. Children may be exposed to an increased excess cancer risk of 4E-5 from ingesting fish caught in Cameron Lake that contained PCB-1260 and dioxins. This risk is likely to be significantly overestimated due to values assumed for exposure calculations and estimation of cancer risks for less than lifetime exposures. Sediment-bound PCB-1260 and dioxins in Cameron Lake are likely to be the source of these chemicals in fish tissue. However, these chemicals were not detected in Cameron Lake sediment. Based on model estimates of air concentrations, subsurface contamination by trichloroethylene and VOCs associated with TPHCs does not present excess risks to exposed individuals that exceed 1E-12.

Future child residents may experience elevated excess cancer risks (7E-5) from eating fish from Cameron Lake and ingesting and contacting yard and landfill soils. Future adult residents may experience elevated cancer risks (3E-5) from ingestion and dermal contact with contaminated yard soil. These risks are due to the presence of PCB-1260 in fish (for children), and beryllium, dieldrin, dioxins, heptachlor, and PCB-1260 in soil where future yards may be located. Based on model estimates of air concentrations, subsurface concentrations of benzene, trichloroethylene, and VOCs associated with TPHCs do not present excess risks to exposed

individuals that exceed 1E-12.

2.6.6 Uncertainties in the Baseline Risk Assessment

An analysis of significant sources of uncertainty in the baseline risk assessment indicates that total site risks may be overestimated due primarily to: (1) The use of conservative values for exposure factors; (2) Calculation of risks for infrequently detected chemicals; and (3) Calculation of risk for chemicals (i.e., beryllium) present at site locations at concentrations not statistically different from ambient levels.

2.7 ENVIRONMENTAL RISKS

2.7.1 Ecological Risk Under Current Land Use Conditions

No significant ecological resources exist in the terrestrial environment at the Cameron Station site as a result of its developed nature. Significant aquatic resources exist in Cameron Lake and surface streams on the south and east borders of the site. No critical habitats nor endangered species were identified at the site. No adverse effects, therefore, would result to critical habitats or endangered species from site conditions.

A productive fishery exists in Cameron Lake. Cameron Lake is also used by migratory waterfowl. Transient individuals of native species of wildlife may use streams near the site, although none were observed during site reconnaissance.

Seven metals (aluminum, barium, beryllium, chromium, copper, iron, and zinc) and three organic compounds (fluoranthene, phenanthrene and pyrene) are elevated in Cameron Lake sediments by a factor of 10 over concentrations observed in sediment at background stream reference locations. Evidence of effects levels at other sites indicates that concentrations of copper, lead and zinc at or below levels observed in Cameron Lake sediments may cause adverse effects in biota, primarily benthic organisms, exposed to contaminated sediments.

Ambient water concentrations of aluminum, cadmium, silver and zinc in nearby streams exceed ambient water quality criteria for protection of aquatic life and toxic levels in bioassays. These are more likely due to releases from upstream sources than from Cameron Station. Cadmium,

lead, silver, and zinc concentrations in Cameron Lake also exceeded AWQCs, but their concentrations were typical of those found in urban runoff.

2.7.2 Ecological Risk Under Future Land Use Conditions

Areas where significant ecological resources exist near this site are unlikely to be impacted adversely by planned reuse. Waterfowl, urban wildlife and transient native species are likely to relocate to other nearby areas in response to any changes affecting aquatic resources at the site.

2.8 DESCRIPTION OF ALTERNATIVES

Selection of the remedial action alternatives was conducted through a systematic screening process described in detail in the FS report. The alternatives were developed from technology types and process options that can be effectively implemented at the site. Once the alternatives were developed, they were evaluated for effectiveness, implementability and cost. The remedial alternatives discussed in this section represent alternatives retained after this screening process. The Army's preferred alternative for remediating each OU is indicated. Preferred alternatives were selected based on a comparative analysis of all alternatives described later in this document.

2.8.1 OU-1 PCB Transformer Service, Storage and Spill Areas

Alternative 1-1:	No Action.
Alternative 1-2:	Excavation and Off-Site Disposal in RCRA Landfill. (Preferred)
Alternative 1-3:	Excavation and Off-Site Thermal Oxidation.

Alternative 1-1: No Action

Estimated Capital Cost: $0
Estimated Annual O&M Cost: $0
Estimated Present Worth: $0
Estimated Duration: None

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. The no action alternative will involve no remedial action. The site will remain in its current condition. Although significant PCB contamination does not exist, remediation is being proposed since the site will be made available for unrestricted use.

Alternative 1-2: Excavation and Off-Site Disposal in RCRA Landfill (Preferred)

Estimated Capital Cost: $16,300
Estimated Annual O&M Cost: $0
Estimated Present Worth: $16,300
Estimated Duration: one month

Approximately 10 cubic yards (CY) of PCB and pesticide-containing material in OU-1 will be excavated and removed to an off-site, RCRA Subtitle C landfill. The excavated area will be backfilled with clean soil and covered with asphalt. Placement of the wastes in an off-site permitted landfill will reduce the mobility of PCBs and pesticides.

Alternative 1-3: Excavation and Off-Site Thermal Oxidation

Treatment Components:

Estimated Capital Cost: $38,100
Estimated Annual O&M Cost: $0
Estimated Present Worth: $38,100
Estimated Duration: one month

This alternative is similar to Alternative 1-2 except that the excavated materials will be treated by an off-site RCRA permitted thermal treatment facility. The off-site thermal treatment facility will comply with emission standards for incinerators. The resulting ash will be disposed of by the thermal treatment facility. Thermal treatment of the contaminated wastes provides multiple benefits of reducing the toxicity and volume of PCBs and pesticides.

2.8.2 OU-3 Landfill

Alternative 3-1: No Action.
Alternative 3-2: Soil Capping, and Monitoring the Landfill. (Preferred)

Alternative 3-1: No Action

Estimated Capital Cost: $0
Estimated Annual O&M Cost: $0
Estimated Present Worth: $0
Estimated Duration: None

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. The no action alternative will involve no remedial action. The site will remain in its current condition. Results of the baseline risk assessment indicated that no excess cancer risk was associated with the landfill area. Although widespread contamination was not identified, remedial action consisting of capping the landfill is being proposed to minimize the potential for future impacts to groundwater.

Alternative 3-2: Soil Capping, and Monitoring the Landfill (Preferred)

Estimated Capital Cost: $36,900
Estimated Annual O&M Cost: $7,700
Estimated Present Worth: $96,400
Estimated Duration: Approximately one year

The total area of the soil cap will be approximately 20,000 square feet. The conceptual design of the cap includes from bottom to top: an 18-inch-thick layer of compacted native soil, a 6-inch-thick layer of topsoil, and a vegetation cover. The cap will be designed to meet the state requirements for the closure of unpermitted construction/demolition/debris landfills. The soil cap will reduce leachate generation and thus protect groundwater.

2.8.3 OU-4 Pesticides Use and Storage Area

Alternative 4-1: No Action.
Alternative 4-2: Excavation and Off-Site Disposal in RCRA Landfill. (Preferred)
Alternative 4-3: Excavation and Off-Site Thermal Oxidation.

Alternative 4-1: No Action

Estimated Capital Cost: $0
Estimated Annual O&M Cost: $0
Estimated Present Worth: $0
Estimated Duration: None

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. The no action alternative will involve no remedial action. The site will remain in its current condition.

Alternative 4-2: Excavation and Off-Site Disposal in RCRA Landfill (Preferred)

Estimated Capital Cost: $27,000
Estimated Annual O&M Cost: $0
Estimated Present Worth: $27,000
Estimated Duration: one month

Approximately 20 cubic yards (CY) of pesticides containing wastes in and around the Building 30 septic tank and the septic tank itself will be excavated and removed to an off-site, RCRA Subtitle C landfill. The excavated area will be backfilled with clean soil. Placement of the wastes in an off-site permitted landfill will reduce the mobility of pesticides.

Alternative 4-3: Excavation and Off-Site Thermal Oxidation

Estimated Capital Cost: $72,000
Estimated Annual O&M Cost: $0
Estimated Present Worth: $72,000
Estimated Duration: one month

This alternative is basically the same as Alternative 4-2 except that the excavated materials will be treated by an off-site RCRA permitted thermal treatment facility. The off-site thermal treatment facility will comply with emission standards for incinerators. The resulting ash will be disposed of by the thermal treatment facility. Thermal treatment of the contaminated wastes provides multiple benefits of reducing the toxicity and volume of pesticides.

2.8.4 OU-5 Sanitary and Storm Sewer Systems

Alternative 5-1:	No Action.
Alternative 5-2:	Groundwater Collection Followed by Air Stripping and Discharge to Surface Water (Preferred)
Alternative 5-3:	Groundwater Collection Followed by Liquid Phase Carbon Adsorption and Discharge to Surface Water

Alternative 5-1: No Action

Estimated Capital Cost: $0
Estimated Annual O&M Cost: $7,700
Estimated Present Worth: $118,400
Estimated Duration: None

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. The no action alternative will involve no remedial action other than annual VOC analyses of groundwater samples collected from existing monitoring wells. There will be no reduction in toxicity, mobility or volume of contaminants except through natural fate and transport processes.

Alternative 5-2: **Groundwater Collection Followed by Air Stripping and Discharge to Surface Water** (Preferred)

Estimated Capital Cost: $213,000
Estimated Annual O&M Cost: $53,400
Estimated Present Worth: $1,034,200
Estimated Duration: Thirty years

Trichloroethene (TCE) contaminated groundwater in OU-5 will be pumped at a flow rate of approximately 40 gallons per minute (gpm) and remediated with an air stripping unit to remove VOCs. The need for pretreatment for removal of certain metals will be evaluated in pilot studies and if needed, would be implemented. The treated groundwater will be discharged to Backlick Run via an underground pipe. It is estimated that the volatile organic emission rate from the air stripper would be approximately 0.3 lb/day. The air discharged from the stripper will be routed through a granular activated carbon filter for removal of the VOCs. No VOCs, therefore, will be discharged to the atmosphere at the site. Reduction in groundwater contamination is provided by this alternative. Since this remedial action would be ongoing at the time of property transfer, transfer documents will reflect the remediation of OU-5. The Army has selected Alternative 5-2 with carbon treatment of the air discharge stream after considering the Alexandria Health Department's comments concerning the on-site discharge of VOCs associated with Alternative 5-2 without such treatment. Alternative 5-2 (without treatment of the air discharge) had been identified as the preferred alternative in the Proposed Plan. The estimated rate of VOC emissions to the atmosphere at the site from the air stripper had been judged not to represent a significant environmental or human health concern. In response to the Health Department's request, however, carbon treatment of the air discharge has been added to the remedial alternative.

The level of protectiveness from the revised Alternative 5-2 will be the same as that from Alternative 5-3 (no on-site emissions) while providing a significant cost savings. In fact, it is estimated that the present worth of Alternative 5-2 with carbon treatment of the air discharge may be less than the estimated present net worth of Alternative 5-2 without the carbon treatment of the air discharge due to reductions in the overall O&M costs over the life of the project.

Alternative 5-3: **Groundwater Collection Followed by Liquid Phase Carbon Adsorption and Discharge to Surface Water**

Estimated Capital Cost: $234,900
Estimated Annual O&M Cost: $56,100
Estimated Present Worth: $1,097,300
Estimated Duration: Thirty years

This alternative is similar to Alternative 5-2 except that the extracted groundwater will be treated by a liquid phase carbon adsorption unit (two canisters in series). The carbon consumption rate is estimated to be approximately 3 lbs/day, which will not pose unacceptable health risks to the public. The spent activated carbon will be shipped to the carbon supplier for off-site regeneration. Reduction in groundwater contamination is also provided by this alternative.

2.8.5 OU-6 Acid Pits

Alternative 6-1: No Action.
Alternative 6-4: Excavation and Off-Site Thermal Oxidation and Solidification. (Preferred)

Alternative 6-1: **No Action**

Estimated Capital Cost: $0
Estimated Annual O&M Cost: $0
Estimated Present Worth: $0
Estimated Duration: None

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. The no action alternative will involve no remedial action. The site will remain in its current condition.

Alternative 6-4: **Excavation and Off-Site Thermal Oxidation and Solidification (Preferred)**

Estimated Capital Cost: $44,600
Estimated Annual O&M Cost: $0
Estimated Present Worth: $44,600
Estimated Duration: one month

Approximately ten cubic yards (CY) of TPHC and metal contaminated soils will be excavated from two acid pit areas for disposal in a RCRA permitted thermal treatment facility. The excavated area will be backfilled with clean soil. The off-site thermal treatment facility will comply with technical standards for incinerators. Thermal treatment of the contaminated wastes reduces the toxicity and volume of organic compounds. Metals in the ash will be solidified before disposal. Thermal treatment of the contaminated wastes reduces the toxicity and volume of organics. Solidification is also widely used to immobilize metal contents in the waste.

2.8.6 OU-8 PX Service Station and Building 2 Underground Storage Tanks

Alternative 8-1:	No Action.
Alternative 8-2:	Groundwater Collection Followed by Air Stripping System and Discharge to Surface Water.
Alternative 8-3:	Groundwater Collection Followed by Liquid Phase Carbon Adsorption and Discharge to Surface Water.
Alternative 8-4:	Groundwater Collection Followed by Air Stripping and In-Situ Bioremediation. (Preferred)

Alternative 8-1: **No Action**

Estimated Capital Cost: $0
Estimated Annual O&M Cost: $7,700
Estimated Present Worth: $118,400
Estimated Duration: None

The Superfund program requires that the "no action" alternative be evaluated at every site to establish a baseline for comparison. The no action alternative will involve no remedial action other than annual VOC analyses of groundwater samples collected from existing monitoring wells. There will be no reduction in toxicity, mobility or volume of contaminants except through natural fate and transport process.

Alternative 8-2: Groundwater Collection Followed by Air Stripping and Discharge to Surface Water

Estimated Capital Cost: $148,200
Estimated Annual O&M Cost: $53,400
Estimated Present Worth: $750,200
Estimated Duration: Approximately seventeen years

Petroleum contaminated groundwater (BTEX) in OU-8 will be pumped at a rate of approximately 40 gallons per minute (gpm) and remediated with an air stripping unit to remove volatile organics. The treated groundwater will be discharged to Backlick Run via an underground pipe. It is estimated that the volatile organic emission rate from the air stripping system will be approximately 12 lbs/day which will not pose unacceptable health risks to the public. Reduction in groundwater contamination is provided by this alternative.

Alternative 8-3: Groundwater Collection Followed by Liquid Phase Carbon Adsorption and Discharge to Surface Water

Estimated Capital Cost: $184,500
Estimated Annual O&M Cost: $171,300
Estimated Present Worth: $2,115,800
Estimated Duration: Approximately seventeen years

This alternative is similar to Alternative 8-2 except that the extracted groundwater will be treated by a liquid phase carbon adsorption unit (two canisters in series). The carbon consumption rate is estimated to be approximately 120 lbs/day (assuming 10 % adsorption capacity). The spent activated carbon will be shipped to the carbon supplier for off-site regeneration. Reduction in groundwater contamination is also provided by this alternative.

Alternative 8-4: **Groundwater Collection Followed by Air Stripping and In-Situ Bioremediation** (Preferred)

Estimated Capital Cost: $293,700
Estimated Annual O&M Cost: $83,100
Estimated Present Worth: $935,400
Estimated Duration: Approximately ten years

BTEX contaminated groundwater will be extracted from downgradient of the aquifer at a flow rate of approximately 40 gpm. The extracted groundwater will be stripped to remove dissolved VOCs. Oxygen (delivered as a dilute solution of hydrogen peroxide) and nutrients (such as nitrogen and phosphorus),if needed, will be introduced to the treated effluent using a surface mixing tank. The oxygen-enriched groundwater will then be reinjected upgradient of the contaminated aquifer. When the oxygen-enriched injected water flows through the contaminated aquifer, the presence of the dissolved oxygen and nutrients should stimulate biodegradational activities of microorganisms in the aquifer thus enhancing the naturally occurring biological reactions. The organic contaminants (such as BTEX) in the groundwater will be destroyed by the stimulated biological reaction. This alternative will effectively reduce the toxicity and volume of the contaminants in the groundwater. Since this remedial actin will be ongoing at the time of property transfer, transfer documents will reflect remediation of OU-8.

2.9 SUMMARY OF THE COMPARATIVE ANALYSIS OF ALTERNATIVES

Selection of preferred alternatives for each OU were made after performing a detailed analysis for all alternatives described above. Each alternative was evaluated against the nine criteria established by EPA under CERCLA to evaluate potential remedial process alternatives. The nine evaluation criteria are:

- Overall protection of human health and the environment;
- Compliance with ARARs;
- Long-term effectiveness;
- Reduction of toxicity, mobility or volume;
- Short-term effectiveness;
- Implementability;
- Cost;

- State acceptance; and
- Community acceptance.

Two criteria, overall protection of human health and the environment; and compliance with ARARs, are threshold factors. Two criteria, state acceptance and community acceptance, are modifying considerations. The remaining criteria are the primary balancing factors. A brief description of each criteria is provided in Appendix D.

For each operable unit, based upon current information, the preferred alternative appears to provide the best balance with respect to the nine criteria. This section profiles the performance of the preferred alternatives against these nine criteria. Results of the evaluation are further summarized in Tables 2-8 through 2-13.

2.9.1 Overall Protection of Human Health and the Environment

The no-action alternative does not protect human health or the environment from potential risks posed by the contaminated materials, and thus it is not considered further in this analysis as an option for any OU on the site. Alternatives 1-2, 1-3, 4-2, 4-3, and 6-4 will achieve the soil remediation objective of preventing worker exposure to contaminated soils and protecting the human health and the environment by reducing the potential risk from direct contact with contaminants. The soil cap applied in Alternative 3-2 will reduce direct contact with the landfilled materials, minimize surface water infiltration and thus promote groundwater protection, and meet the landfill closure requirements.

Alternatives 5-2, 5-3, 8-2, 8-3 and 8-4 will achieve the remedial objectives for groundwater. The preferred alternative 5-2 is more cost-effective than alternative 5-3. The preferred alternative 8-4 provides the fastest time for groundwater restoration.

The no-action alternative provides no remedial measures, no risk reductions, and does not achieve remedial action objectives and is not evaluated further.

2.9.2 Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)

It is expected that Alternatives 1-2, 1-3, 3-2, 4-2, 4-3, and 6-4 will meet action-specific ARARs. The Federal Safe Drinking Water Act (SDWA) provides for protection of human health from contaminants in drinking water by establishing MCLs. These requirements will be met under Alternatives 5-2, 5-3, 8-2, 8-3 and 8-4. A list of state and Federal ARARs attained by the preferred alternatives for each operable unit are included in Tables 2-14 through 2-16.

2.9.3 Long-Term Effectiveness and Permanence

Under Alternatives 1-2, 1-3, 4-2, 4-3, and 6-4, the contaminated materials will be excavated and transported off-site for landfill or incineration. Therefore risk through direct exposure to the contaminated waste will be eliminated by meeting clean-up goals with these alternatives. Incineration provides the highest level of long-term effectiveness because contaminants will be destroyed or reduced in volume during incineration. The soil cap applied under Alternative 3-2 will minimize the direct exposure to the landfilled materials. Moreover, the soil cap and revegetation are likely to be effective in reducing the amount of infiltration and surface runoff.

Alternatives 5-2, 5-3, 8-2, 8-3 and 8-4 will provide for permanent removal of VOCs from the groundwater through the treatment processes. Under optimum operational conditions, Alternative 8-4 will offer the greatest long-term effectiveness because of quicker aquifer restoration by in-situ microbial reactions.

2.9.4 Reduction in Toxicity, Mobility and Volume of the Contaminants Through Treatment

Alternatives 1-2 and 4-2 will reduce the mobility of the contaminants through placement in an off-site RCRA landfill. Alternatives 1-3 and 4-3 provides the multiple benefits of reducing toxicity and volume of the PCBs and pesticides through thermal treatment (incineration). Alternative 6-4 will also reduce the toxicity and volume of petroleum contaminated soils. The ash generated by the incinerator will be solidified to immobilize the metal contents. Alternative 3-2 will reduce the mobility of the contaminants by reducing the potential for leaching.

The air stripping system applied in Alternatives 5-2 and 8-2 will effectively remove VOCs in groundwater, but will not reduce the toxicity, mobility or volume of contaminants. However, volume and mobility reduction will be achieved by carbon adsorption in Alternatives 5-3 and 8-3. Toxicity will be reduced if the spent carbon is thermally regenerated. Alternative 8-4 will effectively reduce the toxicity and volume of contaminants in groundwater through in-situ biological reactions.

2.9.5 Short-Term Effectiveness

There will be no risks to the public or environment during the implementation of the no-action alternatives because no remedial actions will occur. The short-term risks to the community and environment associated with Alternatives 1-2, 1-3, 3-2, 4-2, 4-3, and 6-4 will be minimal, because construction is expected to occur over a short period of time (from 1 month to 1 year) and risks could be mitigated through the use of dust control. Workers may be exposed to contaminants during implementation of these alternatives, but the risks will be minimized through the use of appropriate personal protection equipment.

Alternatives 5-2, 5-3, 8-2 and 8-3 involve the installation of extraction wells and construction of a groundwater treatment system on-site. Alternative 8-4 will have similar short-term effects as the above alternatives, but more extensive construction activities are required to implement this alternative (i.e., the injection system and a more extensive piping system will be installed). VOC emissions from the air stripping system in Alternatives 5-2 and 8-2 will not pose unacceptable risk to the community and the environment due to its relatively low emission rate. It is expected that treated water from Alternatives 5-2, 5-3, 8-2 and 8-3 will meet surface water standards and will be discharged to Backlick Run. It is estimated that the time required to reach the groundwater cleanup goals is approximately 30 years for Alternatives 5-2 and 5-3, approximately 17 years for Alternatives 8-2 and 8-3, and approximately 10 years for Alternative 8-4. Workers may be exposed to contamination during implementation of these alternatives, but the risks will be minimized through the use of appropriate personal protection equipment.

2.9.6 Implementability

Alternatives 1-2, 1-3, 4-2, 4-3 and 6-4 are proven and reliable for achieving the specified cleanup goals for soil contamination. Soil capping in Alternative 3-2 is also easy to implement. All other equipment, materials, and services for performance of these alternatives are readily available.

Alternatives 5-2, 5-3, 8-2 and 8-3 are relatively easy to implement. The proposed treatment technologies in Alternatives 5-2, 5-3, 8-2 and 8-3 are proven and reliable for removal of VOCs from contaminated groundwater. The equipment and materials needed for implementation of these alternatives are readily available. Alternative 8-4 will be slightly less implementable from a technical standpoint than other alternatives, because of the unpredictable in-situ microbial reactions. Alternative 8-4 will also be less implementable from an administrative standpoint than other alternatives, due to permits required for injection of oxygen- and nutrients-enriched groundwater. The effectiveness of these alternatives will be evaluated by sampling and analysis of groundwater and treated water. Treatability studies are recommended to verify and optimize the effectiveness of treatment processes in Alternatives 5-3, 8-3 and 8-4.

2.9.7 Costs

The present worth costs of the preferred alternatives are listed below:

Alternative 1-2	$16,300
Alternative 3-2	$96,400
Alternative 4-2	$27,000
Alternative 5-2	$1,034,200
Alternative 6-4	$44,600
Alternative 8-4	$935,400

The estimated present worth costs for the other remaining alternatives are as follow:

Alternative 1-3	$38,100
Alternative 4-3	$72,000
Alternative 5-1	$118,400
Alternative 5-3	$1,097,300

Alternative 8-1	$118,400
Alternative 8-2	$750,200
Alternative 8-3	$2,115,800

The preferred alternatives have been judged to be cost effective means of achieving the necessary level of compliance with health protection and other regulatory requirements.

2.9.8 State Acceptance

The Commonwealth of Virginia has concurred with the preferred remedial alternatives outlined in this document.

2.9.9 Community Acceptance

Community acceptance is assessed in the attached Responsiveness Summary. The Responsiveness Summary provides a review of the public comments received on the Proposed Plan. Based on the limited number of public comments received, and modifications made to address these comments, community acceptance of the preferred remedial alternatives has been assumed.

2.10 THE SELECTED REMEDY

After careful consideration of the proposed alternatives, the Army's preferred alternative for each of the six OUs are listed below with estimated risks calculated during the FS (Life Systems, Inc., 1992). A description of these preferred alternatives is provided in Section 2.8 of this document. Any potential future cleanup that may be required for the benzene and 1,2-DCA contamination observed in OU-5 will be addressed in a separate ROD.

- OU-1, Alternative 1-2 — Excavation of approximately 10 cubic yards of PCB and pesticide-containing material and disposal at an off-site RCRA Subtitle C landfill. The noncancer hazard index and cancer risk estimate associated with this alternative could not be recalculated due to unavailable slope factors.

- OU-3, Alternative 3-2 — Soil capping and monitoring of the approximately 20,000 square foot landfill. The cap will be designed to meet the state requirements for the closure of unpermitted construction/demolition/ debris landfills. The noncancer hazard index associated with this alternative was calculated at 2.7E-2; the cancer risk was estimated at 1.6E-7.

- OU-4, Alternative 4-2 — Excavation of approximately 20 cubic yards of pesticide-containing wastes around the Building 30 septic tank, removal of the septic tank, and disposal at a RCRA Subtitle C landfill. The noncancer hazard index associated with this alternative was calculated at 2.2E-8; the cancer risk was estimated at 2.6E-11.

- OU-5, Alternative 5-2 — Groundwater Collection followed by Air stripping and discharge to Surface Water (with carbon treatment of air discharge) of TCE and 1,1-DCE contaminated groundwater near Building 2. The noncancer hazard index associated with this alternative was calculated at 2.2E-06 to 1.2E-08; the cancer risk was estimated at 3.6E-7 to 7.4E-10.

- OU-6, Alternative 6-4 — Excavation of approximately 10 cubic yards of TPHC and metal contaminated soils from two acid pit locations for disposal in an off-site RCRA permitted thermal treatment facility. Metals in the ash will be solidified before disposal. The noncancer hazard index associated with this alternative was calculated at 2.6E-03; the cancer risk was estimated at 1.6E-8.

- OU-8, Alternative 8-4 — Groundwater Collection followed by Air Stripping and In-Situ Bioremediation of BTEX contaminated groundwater near the Building 2 and the PX Service Station. The noncancer hazard index associated with this alternative was calculated at 9.6E-4 to 1.7E-5; the cancer risk was estimated at 8.5E-7 to 1.7E-9.

Tables 2-17 and 2-18 describe the cleanup goals that were determined in the FS to be appropriate for the various chemicals of concern and media type. However, the Virginia DEQ will make the final determination of the acceptable level of cleanup. For instance, OU-8 is being handled under the supervision of DEQ's Water Division per Virginia Regulation VR 680-13-02, Sections 6.3, 6.4, 6.5 and 6.6. Any potential future cleanup that may be required for the benzene and 1,2-DCA contamination observed in OU-5 will be addressed in a separate ROD.

2.11 STATUTORY DETERMINATIONS

Section 121 of CERCLA has established several statutory requirements and preferences for remedial actions. Under this section the selected remedy must:

- Be protective of human health and the environment;
- Comply with ARARs (or justify an ARAR waiver);
- Be cost-effective;
- Utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable; and
- Satisfy the preference for treatment that reduces toxicity, mobility, or volume as a principal element, or provide an explanation as to why this preference is not satisfied.

This section provides a brief discussion of how the selected remedy meets the statutory requirements and preferences of CERCLA Section 121 described above.

2.11.1 Protection of Human Health and the Environment

The selected remedy would protect the human health and the environment by reducing the potential risk from direct contact with contaminated soils. Capping of the landfill will reduce direct contact with the landfilled materials and promote groundwater protection by minimizing surface water infiltration. Remediation of the groundwater will reduce the discharge of contaminated groundwater to surface water pathways and lower contaminants in the groundwater to acceptable levels.

2.11.2 Compliance With ARARS

The selected remedial action will comply with all applicable or relevant and appropriate requirements. A complete listing of location-, action-, and chemical-specific ARARs, attained by each selected alternative, are included in Tables 2-14 through 2-16.

2.11.3 Cost-Effectiveness

The selected alternatives are cost-effective because they have been determined to provide overall effectiveness proportional to their costs. The selected alternatives are less costly than other alternatives, while providing a comparable level of protection, or they are expected to attain remedial goals in a shorter period of time while remaining comparable in cost to other alternatives.

2.11.4 Utilization of Permanent Solutions to the Maximum Extent Practicable

The Army has determined that the selected alternatives will offer the use of permanent treatment technologies to the maximum extent practicable while maintaining cost effectiveness. These alternatives provide long term protection to human health and the environment through removal, treatment or immobilization of the contaminated media. The USEPA and the Commonwealth of Virginia have reviewed and concurred with the selected remedy.

2.11.5 Preference for Treatment

The selected alternatives addresses the preference for treatment through groundwater recovery, air-stripping, and in-situ bioremediation. Contaminated soils excavated from the acid pits will

be treated utilizing thermal oxidation. In addition, capping of the landfill and placement of excavated soils in a RCRA C landfill will provide a reduction in mobility.

2.12 DOCUMENTATION OF SIGNIFICANT CHANGES

The preferred alternatives originally presented in the Proposed Plan are also the preferred alternatives selected in the Decision Document. The preferred alternative for OU-5 (Alternative 5-2) was modified to include carbon treatment of the air discharge after considering comments from the Alexandria Health Department. There have been no significant changes made to the remaining selected alternatives since the issuance of the Proposed Plan.

Table 2-1. Summary of Chemicals of Potential Concern at Cameron Station

Category	Chemical
Volatile Organic Compounds (VOCs)	1,2-Dimethylbenzene/o-xylene 1,3-Dimethylbenzene/m-xylene Acetone Benzene Carbon disulfide Ethylbenzene Methylisobutyl ketone Toluene Trichlorofluoromethane Xylenes, total combined
Semivolatile Organics	2,4-Dimethylphenol 2-Methylnaphthalene 2-Methylphenol/2-cresol Acenaphthene Anthracene Benzo[a]anthracene Benzo[a]pyrene Benzo[b]fluoranthene Benzo[g,h,i]perylene Benzo[k]fluoranthene Benzoic acid Bis (2-ethylhexyl) phthalate Chrysene Dibenz[a,h]anthracene Dibenzofuran Fluoranthene Fluorene Indeno[1,2,3-c,d]pyrene Naphthalene Phenanthrene Phenol Pyrene
Pesticides/Polychlorinated Biphenyls (PCBs) and Derivatives	2,2-Bis (para-chlorophenyl)-1,1,1-trichloroethane 2,2-Bis (para-chlorophenyl)-1,1-dichloroethane 2,2-Bis (para-chlorophenyl)-1,1-dichloroethene 2,4,5-Trichlorophenoxyacetic acid 2,4-Dichlorophenoxyacetic acid 2-(2,4,5-Trichlorophenoxy) propionic acid Aldrin

Table 2-1. Summary of Chemicals of Potential Concern at Cameron Station

Category	Chemical
Pesticides/Polychlorinated Biphenyls (PCBs) and Derivatives - continued	Alpha chlordane Beta-endosulfan/endosulfan II Dieldrin Endosulfan sulfate Endrin ketone Gamma-chlordane Heptachlor Heptachlor epoxide Lindane Methoxychlor PCB 1260
Chlorinated Dibenzo-p-dioxins	2,3,7,8-Tetrachlorodibenzo-p-dioxin/dioxin Total tetrachlorodibenzo-p-dioxins Total pentachlorodibenzo-p-dioxins Total hexachlorodibenzo-p-dioxins Total heptachlorodibenzo-p-dioxins Octachlorodibenzo-p-dioxin
Chlorinated Dibenzofurans	2,3,7,8-Tetrachlorodibenzofuran Total tetrachlorodibenzofurans Total pentachlorodibenzofurans Total hexachlorodibenzofurans Total heptachlorodibenzofurans Octachlorodibenzofuran
Inorganic Compounds[a]	Aluminum Arsenic Barium Beryllium Bromide Cadmium Chromium Cobalt Fluoride Lead Mercury Nickel Nitrate Nitrite Phosphate Silver Sulfate Thallium Vanadium

(a) Includes essential nutrients (e.g., hexavalent chromium) with reference doses or cancer slope factors.

Table 2-2. Exposure Scenarios Evaluated at Cameron Station

Land Use	Exposed Population	Exposure Point/ Exposure Medium	Exposure Route
Current	Recreational Visitor, (Child)	• Volatile Organics in Air at Cameron Lake from TPH in Subsurface Soil	Inhalation
		• Air Particulates at Cameron Lake from Landfill Surface Soil	Inhalation
		• Cameron Lake Surface Water	Oral Dermal
		• Cameron Lake Sediment	Oral Dermal
		• Cameron Lake Fish	Oral
		• Air Particulates From Service Road Surface Soil at Picnic Ground	Inhalation
		• Air Particulates From Service Road Surface Soil at Ballfield	Inhalation
Current	Recreational Visitor (Adult)	• Volatile Organics in Air at Cameron Lake from TPH in Subsurface Soil	Inhalation
		• Air Particulates at Cameron Lake from Landfill Surface Soil	Inhalation
		• Air Particulates From Service Road Surface Soil at Picnic Ground	Inhalation
		• Air Particulates From Service Road Surface Soil at Ballfield	Inhalation

Table 2-2. Exposure Scenarios Evaluated at Cameron Station

Land Use	Exposed Population	Exposure Point/ Exposure Medium	Exposure Route
Current	Adult Exerciser/Jogger	• Air Particulates on Jogging Trail from Landfill Surface Soil	Inhalation
Current	Adult Exerciser/ Jogger - continued	• Air Particulates at Ballfield From Service Road Surface Soil	Inhalation
Current	Gas Station Worker	• Volatile Organics in Air from TPH[a] in Subsurface Soil	Inhalation
		• Air Particulates from Landfill Surface Soil	Inhalation
Current	Outdoor Maintenance Worker	• Fenceline Surface Soil	Oral Dermal
		• Surface Soil Behind Bldg. 30	Oral Dermal
		• Air Particulates from Surface Soil Behind Bldg. 30	Inhalation
Current	Wader (9-16 Yr. Old)	• Holmes Run, Surface Water and Sediment	Oral Dermal
		• Backlick Run, Surface Water and Sediment	Oral Dermal
		• Cameron Run, Surface Water and Sediment	Oral Dermal

Table 2-2. Exposure Scenarios Evaluated at Cameron Station

Land Use	Exposed Population	Exposure Point/ Exposure Medium	Exposure Route
Future	Child Onsite Resident	• Volatile Organics in Air at Cameron Lake from TPH in Subsurface Soil	Inhalation
		• Air Particulates at Cameron Lake from Landfill	Inhalation
		• Cameron Lake Surface Water	Oral Dermal
		• Cameron Lake Sediment	Oral Dermal
		• Cameron Lake Fish	Oral
		• Volatile Organics in Air at Residence from TPH in Subsurface Soil	Inhalation
		• Yard Soil at Future Residence	Oral Dermal
		• Landfill Soil	Oral Dermal
		• Air Particulates From Service Road Surface Soil at Picnic Ground	Inhalation
		• Air Particulates From Service Road Surface Soil at Ballfield	Inhalation
		• Contaminated Soil by PCB Poles	Oral Dermal

Table 2-2. Exposure Scenarios Evaluated at Cameron Station

Land Use	Exposed Population	Exposure Point/ Exposure Medium	Exposure Route
Future	Adult Onsite Resident	• Volatile Organics in Air at Cameron Lake from TPH in Subsurface Soil	Inhalation
		• Air Particulates at Cameron Lake from Landfill Surface Soil	Inhalation
		• Volatile Organics in Air at Residence from TPH in Subsurface Soil	Inhalation
		• Yard Soil at Future Residence	Oral Dermal
		• Air Particulates From Service Road Surface Soil at Picnic Ground	Inhalation
		• Air Particulates From Service Road Surface Soil at Ballfield	Inhalation
		• Air Particulates on Jogging Trail from Landfill Surface Soil	Inhalation
		• Contaminated Soil by PCB Poles	Oral Dermal
Future	On-Site Construction Worker	• Construction Site Soils	Oral Dermal Inhalation

(a) TPH, total petroleum hydrocarbons.

Table 2-3. Inhalation Exposure Time, Frequency, and Duration Terms Used in the Cameron Station Exposure Assessment

Receptor	Exposure Time (hours/day)	Exposure Frequency (days/year)	Exposure Duration (years)
Recreational Visitor to Cameron Lake	2	5	6 (child) 30 (adult)
Recreational Visitor to Picnic Ground	4	10	6 (child) 30 (adult)
Recreational Visitor to Ball Field	2	10	6 (child) 30 (adult)
Adult Exerciser at Ball Field	3	120	30
Adult Jogger on Perimeter Road	0.167	120	30
Gas Station Worker	8	250	10
Building 30 Maintenance Worker	1	40	10
Future Resident	20	350	6 (child) 30 (adult)
Future Adult Recreational User of Cameron Lake	2	5	30
Future Adult Recreational User of Picnic Grounds	4	10	30
Future Construction Worker	8	250	1

Table 2-4. Ingestion and Dermal Contact Exposure Frequency and Duration Terms Used in the Cameron Station Exposure Assessment

Exposure Route	Receptor	Exposure Frequency (days/year)	Exposure Duration (years)
Ingestion of and Dermal Contact with Surface Water and Sediment in Streams	Child Recreational Visitor Age 1-6	5	6
	Wader Age 9-15	10	6
Ingestion of Fish	Child Resident Age 6-12	20	6
Ingestion of and Dermal Contact with Surface Soil	Current Outdoor Worker	40	10
	Future Construction Worker	250	1
	Future Resident Exposure in Yard	350	6 (child) 30 (adult)
	Picnicker Exposure to Transformer Pole Soil	10	6 (child) 30 (adult)
	Future Child Age 1-6 Visit to Landfill Surface	350	6

Table 2-5. Summary of Carcinogenic Effects and Slope Factors for Contaminants of Potential Concern at the Cameron Station Site[a]

Chemical	Target Organ - Route	Weight of Evidence	Slope Factor, (mg/kg-day)$^{-1}$	
			Oral	Inhalation
Aldrin	Liver-oral	B2	1.7E+01	1.7E+01
alpha-Chlordane	Liver-oral	B2	1.3E+00	1.3E+00
Arsenic	Lung-inhalation; skin-oral; limited evidence of other internal cancers; oral and inhalation routes	A	1.8E+00	1.5E+01[b]
Benzene	Non-lymphocytic leukemia-inhalation and oral	A	2.9E-02	2.9E-02
Benzo(a)anthracene	(c)	B2	5.8E-01	--[d]
Benzo(a)pyrene	Stomach-oral; respiratory tract-inhalation; skin-dermal	B2	5.8E+00	--
Benzo(b)fluoranthene	(c)	B2	5.8E-01	--
Benzo(k)fluoranthene	(c)	B2	5.8E-01	--
Beryllium	Lung-inhalation. Osteosarcomas-injection (intravenous or intramedullary)	B2	4.3E+00	8.4E+00
Bis(2-ethylhexyl)phthalate	Liver-oral	B2	1.4E-02	--
Cadmium	Lung-inhalation; insufficient evidence of carcinogenicity-oral	B1 (inhalation)	--	6.3E+00
Chromium (VI)	Lung-inhalation	A (inhalation)	--	4.2E+01
Chrysene	(c)	B2	5.8E-02	--
4,4'-DDD	Lung, liver and thyroid-oral	B2	2.4E-01	--
4,4'-DDE	Liver tumors-oral	B2	3.4E-01	--
4,4'-DDT	Liver tumors-oral	B2	3.4E-01	3.4E-01
Dibenz(a,h)anthracene	(c)	B2	5.8E+00	--

Table 2-5. Summary of Carcinogenic Effects and Slope Factors for Contaminants of Potential Concern at the Cameron Station Site[a]

Chemical	Target Organ - Route	Weight of Evidence	Slope Factor, (mg/kg-day)$^{-1}$	
			Oral	Inhalation
Dieldrin	Liver, lung-oral	B2	1.6E+01	1.6E+01
gamma-Chlordane	Liver-oral	B2	1.3E+00	1.3E+00
Heptachlor	Liver-oral	B2	4.5E+00	4.6E+00
Heptachlor epoxide	Liver-oral	B2	9.1E+00	9.1E+00
Indeno(1,2,3-cd)pyrene	(c)	B2	5.8E-01	--
Lead	Kidney-oral (ATSDR 1991d)	B2	--	--
Nickel	Lung and nasal epithelium-inhalation of nickel refinery dust; Insufficient evidence of carcinogenicity-oral	A (inhalation)	--	8.4E-01
Polychlorinated biphenyls (PCBs)[e]	Liver-oral; inadequate but suggestive evidence of liver cancer by inhalation and dermal routes	B2	7.7E+00	--
2,3,7,8 TCDD	Liver, lung, hard palate, nasal epithelium-oral	B2	1.5E+05[g]	1.5E+05[g]
Trichloroethene[f]	Liver-oral; lung-inhalation	B2	1.1E-02[g]	6.0E-03[g]

(a) Information from IRIS Database (USEPA 1992) unless otherwise stated. Only chemicals with slope factors calculated by EPA are included here.
(b) A slope factor of 15 (mg/kg-day)$^{-1}$ was calculated from the unit risk of 4.29 (ug/m^3)$^{-1}$ as reported on IRIS (USEPA 1992a).
(c) The cancer potency of this PAH is based on its relative toxic equivalence to benzo(a)pyrene. Source: USEPA 1992c.
(d) Not available.
(e) All PCBs evaluated by using SF developed for Aroclor 1260.
(f) The carcinogenicity assessment has been withdrawn by USEPA and is under review.
(g) Information from HEAST (USEPA 1991a).

Table 2-6. Summary of Noncarcinogenic Effects and Critical Toxicity Values for Contaminants of Potential Concern at The Cameron Station Site[a]

Chemical	Effect - Route	Oral CTV			Inhalation CTV		
		RfD_s[b]	RfD_c[c]	Confidence Level	RfD_s[b]	RfD_c[c]	Confidence Level
Acenaphthene	Liver effects-oral	6.0E-01	6.0E-02	Low	–[d]	–	–
Acetone	Increased liver and kidney weights, nephrotoxicity-oral	1.0E-00	1.0E-01	Low	–	–	–
Aldrin	Liver toxicity-oral	3.0E-05	3.0E-05	Medium	–	–	–
alpha-Chlordane	Liver necrosis-oral	6.0E-05	6.0E-05	Low	–	–	–
Aluminum	Asthma, pulmonary fibrosis-inhalation; neurological disorders-oral and kidney dialysis (ATSDR 1990a)	–	–	–	–	–	–
Anthracene	No treatment related effects	3.0E+00	3.0E-01	Low	–	–	–
Aroclor-1242, 1248, 1254, 1260	Liver effects, chloracne-all routes (ATSDR 1991f)	–	–	–	–	–	–
Arsenic	Mucous membrane irritation-inhalation; liver and kidney effects-oral; keratosis, hyperpigmentation, neurological disorders-oral and inhalation routes (ATSDR 1991a)	3.0E-04	3.0E-04	Medium	–	–	–
Barium	Hypertension-oral	7.0E-02	7.0E-02	Medium	1.0E-03	1.0E-04[e]	–
Benzene	Hematological effects - oral and inhalation	–	–	–	–	–	–
Benzaldehyde	Kidney toxicity, forestomach lesions-oral	–	1.0E-01	Low	–	–	–
Benzo(a)anthracene	(f)	–[f]	–[f]	–	–	–	–
Benzo(a)pyrene	(f)	–[f]	–[f]	–	–	–	–
Benzo(b)fluoranthene	(f)	–[f]	–[f]	–	–	–	–
Benzo(g,h,i)perylene	(f)	–[f]	–[f]	–	–	–	–
Benzo(k)fluoranthene	(f)	–[f]	–[f]	–	–	–	–
Benzoic acid	Irritation, malaise-oral	4.0E+00	4.0E+00	Medium	–	–	–

Table 2-6 - continued

Table 2-6. Summary of Noncarcinogenic Effects and Critical Toxicity Values for Contaminants of Potential Concern at The Cameron Station Site[a]

Chemical	Effect - Route	Oral CTV			Inhalation CTV		
		RfD_s[b]	RfD_c[c]	Confidence Level	RfD_s[b]	RfD_c[c]	Confidence Level
Beryllium	Oral RfD calculated on the basis of a no adverse effects level	5.0E-03	5.0E-03	Low	--	--	--
bis(2-ethylhexyl)phthalate	Liver toxicity, reproductive and developmental effects-oral (ATSDR 1991c)	2.0E-02	2.0E-02	Medium	--	--	--
Cadmium	Kidney-oral and inhalation damage routes; impaired respiratory function-inhalation; possible immune alterations-oral (ATSDR 1991b)	-- --	1.0E-03[g] 5.0E-04[h]	High High	-- --	-- --	-- --
Carbon disulfide	Neurological, cardiovascular, developmental and kidney effects-inhalation (ATSDR 1990b)	1.0E-01	1.0E-01	Medium	2.9E-03	2.9E-03[e]	--
Chloroethane	Neurological effects - inhalation	--	--	--	--	--	--
Chromium (VI)[i]	Atrophy of nasal mucosa-inhalation; oral RfD calculated on the basis of a no adverse effects level	2.0E-02	5.0E-03	Low	5.7E-06	5.7E-07[e]	--
Chrysene	(f)	_[f]	_[f]	--	--	--	--
Cobalt	Asthma, fibrosis-inhalation. Cardiomyopathy-oral (ATSDR 1990c)	--	--	--	--	--	--
4,4'-DDD	Liver damage - oral	--	--	--	--	--	--
4,4'-DDT	Liver damage-oral	5.0E-04	5.0E-04	Medium	--	--	--
4,4'-DDE	Liver damage - oral	--	--	--	--	--	--
Dibenz(a,h)anthracene	(f)	_[f]	_[f]	--	--	--	--
Dibenzofuran	--	--	--	--	--	--	--
2,4-Dimethylphenol	Clinical signs of toxicity, changes in hematologic parameters-oral	2.0E-01	2.0E-02	Low	--	--	--

Table 2-6 - continued

Table 2-6. Summary of Noncarcinogenic Effects and Critical Toxicity Values for Contaminants of Potential Concern at The Cameron Station Site[a]

Chemical	Effect - Route	Oral CTV			Inhalation CTV		
		RfD_s[b]	RfD_c[c]	Confidence Level	RfD_s[b]	RfD_c[c]	Confidence Level
Dieldrin	Liver lesions-oral	5.0E-05	5.0E-05	Medium	--	--	--
Endosulfan (I, II)	Mild kidney lesions-oral	2.0E-04	5.0E-05	Medium	--	--	--
Endosulfan sulfate	Mild kidney lesions - oral	--	--	--	--	--	--
Endrin	Histological lesioning in liver, convulsions-oral	5.0E-04	3.0E-04	Medium	--	--	--
Ethylbenzene	Liver and kidney effects-oral; developmental toxicity-inhalation	1.0E+00	1.0E-01	Low	2.9E-01	2.9E-01	Low
Fluoranthene	Liver and kidney effects-oral	4.0E-01	4.0E-02	Low	--	--	--
Fluorene	Decreased red blood cells, hemoglobin-oral	4.0E-01	4.0E-02	Low	--	--	--
Fluoride	Objectionable dental fluorosis, skeletal fluorosis-oral	6.0E-02	6.0E-02	High	--	--	--
gamma-BHC	Liver and kidney effects-oral	3.0E-03	3.0E-04	--	--	--	--
gamma-Chlordane	Liver necrosis-oral	6.0E-05	6.0E-05	Low	--	--	--
Heptachlor	Increased liver weight-oral	5.0E-04	5.0E-04	--	--	--	--
Heptachlor epoxide	Increased liver weight-oral	--	1.3E-05	Low	--	--	--
Indeno(1,2,3-cd)pyrene	(f)	--[f]	--[f]	--	--	--	--
Lead	Neurological deficiencies, hypertension, inhibition heme synthesis, reproductive effects-oral and inhalation routes (ATSDR 1991d)	--[j]	--[j]	--	--	--	--
Mercury	Neurotoxicity-inhalation; kidney effects-oral	3.0E-04	3.0E-04[e]	--	8.6E-05	8.6E-05[e]	--
2-Methylnaphthalene	(k)	--[k]	--[k]	--	--	--	--
Methoxychlor	Excessive loss of litters - oral	5.0E-03	5.0E-03	Low	--	--	--

Table 2-6. Summary of Noncarcinogenic Effects and Critical Toxicity Values for Contaminants of Potential Concern at The Cameron Station Site[a]

Chemical	Effect - Route	Oral CTV			Inhalation CTV		
		RfD_s[b]	RfD_c[c]	Confidence Level	RfD_s[b]	RfD_c[c]	Confidence Level
2-Methylphenol	Decreased body weight and neurotoxicity-oral	5.0E-01	5.0E-02	Medium	--	--	--
4-Methyl-2-pentanone	Liver and kidney effects-oral and inhalation	5.0E-01	5.0E-02[e]	--	2.0E-01	2.0E-02[e]	--
Molybdenum	Biochemical changes - oral	4.0E-03	4.0E-03[e]	--	--	--	--
Naphthalene	Hemolytic anemia-oral and inhalation; kidney, reproductive and other effects-oral	4.0E-02	4.0E-03[e]	--	--	--	--
Nickel (soluble salts)	Hematological, developmental effects-oral; respiratory, immune and reproductive effects-inhalation (ATSDR 1991e)	2.0E-02	2.0E-02	Medium	--	--	--
Nitrate	Methemoglobinemia-oral	--	1.6E+0	High	--	--	--
Nitrite	Methemoglobinemia-oral	1.0E-1	1.0E-1	High	--	--	--
Phenanthrene	(f)	--[f]	--[f]	--	--	--	--
Phenol	Developmental and kidney damage, fetotoxicity-oral	6.0E-01	6.0E-01	Low	--	--	--
Pyrene	Kidney damage-oral	3.0E-01	3.0E-02	Low	--	--	--
Silver	Skin discoloration (Argyria)-oral	5.0E-03	5.0E-03	Low	--	--	--
Silvex	Changes in liver-oral	--	8.0E-03	Medium	--	--	--
Sulfate	Diarrhea at high concentrations-oral	--	--	--	--	--	--
2,3,7,8 TCDD	Chloracne, porphyria, liver damage, neurological effects - oral and inhalation	--	--	--	--	--	--
Thallium	Hair loss (Alopecia) and increased liver enzymes-oral	7.0E-04	7.0E-05[e]	--	--	--	--
Toluene	Changes in liver and kidney weights-oral; central nervous system effects-inhalation	2.0E+00	2.0E-01	Medium	5.7E-01	5.7E-01[e]	--

Table 2-6 - continued

Table 2-6. Summary of Noncarcinogenic Effects and Critical Toxicity Values for Contaminants of Potential Concern at The Cameron Station Site[a]

Chemical	Effect - Route	Oral CTV			Inhalation CTV		
		RfD_s[b]	RfD_c[c]	Confidence Level	RfD_s[b]	RfD_c[c]	Confidence Level
Trichloroethene	Liver, kidney effects-oral and inhalation routes; central nervous system depression-inhalation (ATSDR 1991g)	--	--	--	--	--	--
Trichlorofluoromethane	Elevated blood urea nitrogen, lung lesions - inhalation; increased mortality - oral	7.0E-01	3.0E-01	Medium	2.0E-00	2.0E-01[e]	--
Vanadium	Renal and gastrointestinal effects - oral; respiratory irritation-inhalation	7.0E-03	7.0E-03[e]	--	--	--	--
Xylenes (total)	Central nervous system toxicity-oral and inhalation; developmental effects-oral	4.0E+00	2.0E+00	Medium	8.6E-02	8.6E-02[e]	--
m-Xylenes	Hepatomegaly-inhalation; hepatomegaly, hyperactivity, decreased body weight, increased mortality at higher dose-oral	4.0E+00	2.0E+00	Medium	1.0E+00	2.0E-01[e]	--
o-Xylenes	Fetotoxicity-inhalation; hepatomegaly, hyperactivity, decreased body weight, increase mortality of higher dose-oral	4.0E+00	2.0E+00	Medium	1.0E+00	2.0E-01[e]	--
p-Xylenes	Central nervous system effects, nose and throat irritation - inhalation		--	--	8.6E-02	8.6E-02[e]	--

(a) Units of the RfD are mg/kg-day.
(b) All information from HEAST (USEPA 1991a) unless otherwise noted.
(c) All information from IRIS Database (USEPA 1992) unless otherwise noted.
(d) Not available.
(e) Information from HEAST (USEPA 1991a).
(f) Noncarcinogenic effects of this PAH evaluated using the RfD for pyrene. See text for explanation.
(g) Applicable to cadmium in food or soil.
(h) Applicable to cadmium in water.
(i) All detected chromium assumed to be hexavalent.
(j) Lead will be evaluated based on acceptable blood lead levels using the UBK model.
(k) Noncarcinogenic effects of this compound evaluated using the RfD for naphthalene.

Table 2-7. Chemicals Contributing to Excess Cancer Risk
at a Pathway Level of 1E-6 or Greater

Population	Location	Medium	Route	Contributing Chemicals	Chemical-Specific Cancer Risk
Current Child Visitor	Cameron Lake	Fish	Oral	Gamma chlordane PCB 1260 Dioxin	1E-06 3E-05 1E-05
				Pathway total:	4E-05
				Population total:	4E-05
Current Maintenance Worker	Fenceline Area	Soil	Dermal	Dioxin	2E-06
				Pathway total:	2E-06
				Population total:	2E-06
Future Resident Child	Cameron Lake	Fish	Oral	Gamma chlordane PCB 1260 Dioxin	1E-06 3E-05 1E-05
				Pathway total:	4E-05
	Residence	Soil	Oral	Beryllium Dieldrin Heptachlor PCB 1260 Dioxin	3E-06 5E-06 1E-06 3E-06 8E-06
				Pathway total:	2E-05
		Soil	Dermal	PCB 1260 Dioxin	1E-06 5E-06
				Pathway total:	6E-06
	Landfill	Soil	Oral	Beryllium Benzo(a)pyrene	6E-07 5E-07
				Pathway total:	1E-06
				Population total:	7E-05

le 2-7 - continued

Population	Location	Medium	Route	Contributing Chemicals	Chemical-Specific Cancer Risk
Future Resident Adult	Residence	Soil	Oral	Beryllium Dieldrin PCB 1260 Dioxin	2E-06 3E-06 2E-06 5E-06
				Pathway total:	1E-05
		Soil	Dermal	PCB 1260 Dioxin	4E-06 2E-05
				Pathway total:	2E-05
				Population total:	3E-05

TABLE 2-8
SUMMARY OF DETAILED ANALYSIS
OU-1 PCB TRANSFORMER SERVICE, STORAGE AND SPILL AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE DISPOSAL IN RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
1.0 Short Term Effectiveness			
Protection of workers during remedial actions	Not applicable.	Potential exposure during excavation can be mitigated by personal protection and dust control.	Potential exposure during excavation can be mitigated by personal protection and dust control.
Environmental impacts	Negligible	Proposed technology will minimize risk from direct contact of waste materials.	Available methods will minimize potential risk from emissions in an off-site thermal treatment facility.
Time until action is completed (after ROD signing)	Existing risk remains	< 1 month	< 1 month

TABLE 2-8 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-1 PCB TRANSFORMER SERVICE, STORAGE AND SPILL AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE DISPOSAL IN RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
2.0 Long-Term Effectiveness and Performance			
Magnitude of residual risks	The residual risks to human health and the environment will be the same as the current risk.	Site specific clean-up goals will be achieved.	Site specific clean-up goals will be achieved.
Adequacy of control	Not applicable.	Off-site RCRA landfilling demonstrated to be effective.	Off-site thermal treatment demonstrated to be effective.
Reliability of controls	Not applicable.	Methods employed are generally reliable with a low probability of failure.	Methods employed are generally reliable with a low probability of failure.

TABLE 2-8 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-1 PCB TRANSFORMER SERVICE, STORAGE AND SPILL AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE DISPOSAL IN RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
3.0 **Reduction of Toxicity, Mobility or Volume (TMV)**	No reduction in TMV	Off-site RCRA landfill will reduce mobility of PCBs.	Incineration will destroy the toxicity and volume of PCBs and pesticides.

TABLE 2-8 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-1 PCB TRANSFORMER SERVICE, STORAGE AND SPILL AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE DISPOSAL IN RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
4.0 Implementability			
Technical feasibility	Not applicable.	Off-site RCRA landfill is relatively easy to implement.	Incineration to destroy organics is a proven technology.
Administrative feasibility	Not applicable.	DOT manifesting necessary. No permits required for on-site work. Coordination between EPA and state necessary. Coordination will be necessary with off-site treatment facility.	DOT manifesting necessary. No permits required for on-site work. Coordination between EPA and state necessary. Coordination will be necessary with off-site treatment facility.
Availability of services and materials	Not applicable.	Several off-site RCRA landfills available. Other services and equipment locally available.	Several off-site incinerators are available. Other services and equipment are locally available.
5.0 Cost (Present Worth 30-yr @ 5%)	$0	$16,300	$38,100

TABLE 2-8 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-1 PCB TRANSFORMER SERVICE, STORAGE AND SPILL AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE DISPOSAL IN RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
6.0 Compliance with ARARs	Will not meet ARARs	Will meet ARARs	Will meet ARARs
7.0 Overall Protection of Human Health and Environment	Not protective	Will achieve clean-up goals and thus be protective.	Will achieve clean-up goals and thus be protective.
8.0 State Acceptance		Accepted	
9.0 Community Acceptance	No public comments		

TABLE 2-9
SUMMARY OF DETAILED ANALYSIS
OU-3 LANDFILL
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 SOIL CAPPING AND MONITORING THE LANDFILL
1.0 <u>Short Term Effectiveness</u>		
Protection of workers during remedial actions	Not applicable	Potential exposure during capping construction can be mitigated by personal protection and dust control.
Environmental impacts	Negligible	Increase in dust during construction of cap. Adequate controls can be implemented.
Time until action is completed (after ROD signing)	Existing risk remains	< 1 year

TABLE 2-9 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-3 LANDFILL
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 SOIL CAPPING AND MONITORING THE LANDFILL
2.0 <u>Long-Term Effectiveness and Performance</u>		
Magnitude of residual risks	The residual risks to human health and the environment will be the same as the current risks.	Because landfilled materials do not pose a threat to human health or the environment, there will be minimal long-term residual risk associated with this alternative. A proper designed, constructed and maintained soil cap can provide long-term reliability.
Adequacy of control	Not applicable.	Soil capping is a well established technology. The soil cap will be effective in reducing direct exposure to landfilled wastes and leaching of contaminants.
Reliability of control	Not applicable.	Likelihood of failure is small as long as regular O&M is performed.

TABLE 2-9 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-3 LANDFILL
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 SOIL CAPPING AND MONITORING THE LANDFILL
3.0 Reduction of Toxicity, Mobility or Volume, (TMV)	No reduction in TMV	Will not result in a reduction in toxicity or volume. The cap would indirectly reduce contaminants mobility, by reducing the potential for leaching.
4.0 Implementability		
Technical feasibility	Not applicable.	Capping is relatively easy to implement.
Administrative feasibility	Not applicable.	Generally administratively feasible.
Availability of services and materials	Not applicable.	Services and materials are readily available. Materials to contstruct cap are assumed to be available locally.
5.0 Cost (Present Worth 10-yr @ 5%)	$0	$96,400

TABLE 2-9 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-3 LANDFILL
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 SOIL CAPPING AND MONITORING THE LANDFILL
6.0 Compliance with ARARs	Will not meet ARARs.	Will meet ARARs.
7.0 Overall Protection of Human Health and Environment	Not protective, however risk to human health from direct contact with landfilled materials is currently low.	Risk to human health from direct contact with landfilled materials will be significantly reduced. Cap would also reduce infiltration of water through the fill area thus reducing leaching into groundwater.
8.0 State Acceptance		Accepted
9.0 Community Acceptance	No public comments	

TABLE 2-10
SUMMARY OF DETAILED ANALYSIS
OU-4 PESTICIDES USE AND STORAGE AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
1.0 Short Term Effectiveness			
Protection of workers during remedial actions	Not applicable	Potential exposure during excavation can be mitigated by personal protection and dust control.	Potential exposure during excavation can be mitigated by personal protection and dust control.
Environmental impacts	Negligible	Proposed technology will minimize risk from direct contact of waste materials.	Available methods will minimize potential risk from emissions in an off-site thermal treatment facility.
Time until action is completed (after ROD signing)	Existing risk remains	< 1 month	< 1 month

TABLE 2-10 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-4 PESTICIDES USE AND STORAGE AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
2.0 <u>Long-Term Effectiveness and Performance</u>			
Magnitude of residual risks	The residual risks to human health and the environment will be the same as the current risk.	Site specific clean-up goals will be achieved.	Site specific clean-up goals will be achieved.
Adequacy of control	Not applicable.	Off-site RCRA landfilling demonstrated to be effective.	Off-site thermal treatment demonstrated to be effective.
Reliability of controls	Not applicable	Methods employed are generally reliable with a low probability of failure.	Methods employed are generally reliable with a low probability of failure.

TABLE 2-10 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-4 PESTICIDES USE AND STORAGE AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
3.0 <u>Reduction of Toxicity, Mobility or Volume, (TMV)</u>	No reduction in TMV	Off-site RCRA landfill will reduce mobility of PCBs.	Incineration will destroy the toxicity and volume of PCBs and pesticides.

TABLE 2-10 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-4 PESTICIDES USE AND STORAGE AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
4.0 Implementability			
Technical feasibility	Not applicable	Off-site RCRA landfill is relatively easy to implement.	Incineration to destroy organics is a proven technology.
Administrative feasibility	Not applicable	DOT manifesting necessary. No permits required for on-site work. Coordination between EPA and state necessary. Approval will be necessary for off-site land filling.	DOT manifesting necessary. No permits required for on-site work. Coordination between EPA and state necessary.
Availability of services and materials	Not applicable	Several off-site RCRA landfills available. Other services and equipment locally available.	Several off-site incinerators are available. Other services and equipment are locally available.
5.0 Cost (Present Worth 30-yr @ 5%)	$0	$27,000	$72,000

TABLE 2-10 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-4 PESTICIDES USE AND STORAGE AREAS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 EXCAVATION AND OFF-SITE RCRA LANDFILL	#3 EXCAVATION AND OFF-SITE THERMAL OXIDATION
6.0 Compliance with ARARs	Will not meet ARARs	Will meet ARARs	Will meet ARARs
7.0 Overall Protection of Human Health and Environment	Not protective	Will achieve clean-up goals and thus be protective.	Will achieve clean-up goals and thus be protective.
8.0 State Acceptance		Accepted	
9.0 Community Acceptance	No public comments		

TABLE 2-11
SUMMARY OF DETAILED ANALYSIS
OU-5 SANITARY AND STORM SEWER SYSTEMS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER
1.0 Short Term Effectiveness			
Protection of workers during remedial actions	Not applicable.	Low risks assuming adequate personal protection for workers is provided.	Low risks assuming adequate personal protection for workers is provided.
Environmental impacts	Short-term risks due to groundwater are presently low.	Potential health risks associated with contaminant air emissions resulting from the water treatment process are anticipated to be low. However, if the risk becomes high, additional air emissions controls can be implemented.	Minimal risks to community during implementation.
Time until action is completed (after ROD signing)	The remedial action objectives will not be achieved.	Approximately 25 to 38 years.	Approximately 25 to 38 years.

TABLE 2-11 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-5 SANITARY AND STORM SEWER SYSTEMS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER
2.0 Long-Term Effectiveness and Performance			
Magnitude of residual risks	The long-term risk to human health and the environment would be the same as the current risk. The groundwater contamination is projected to migrate further downgradient.	No long-term residual risk will be associated with the treated groundwater by the air stripping system.	No long-term residual risk would remain from organic conaminants adsorbed to GAC because spent carbon will be thermally regenerated off-site.
Adequacy of control	Not applicable.	Methods employed are generally conventional and effective.	Methods employed are generally conventional and effective.
Reliability of controls	Not applicable.	Groundwater extraction and air stripping treatment are adequate and reliable methods of remediating volatile organic contaminated groundwater.	Groundwater extraction and carbon adsorption treatment are adequate and reliable methods of remediating volatile organic contaminated groundwater.
3.0 Reduction of Toxicity, Mobility or Volume, (TMV)	No reduction in TMV	The air stripping system will effectively remove contaminants from groundwater but will not reduce the toxicity, mobility or volume of contaminants.	Volume and mobility reduction would be achieved by concentrating organic contaminants on the carbon surface. Toxicity reduction would also be achieved if the carbon was thermally regenerated thereby destroying the contaminants.

TABLE 2-11 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-5 SANITARY AND STORM SEWER SYSTEMS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER
4.0 Implementability			
Technical feasibility	Not applicable	Technically feasible. Alternative employs conventional, reliable technologies.	Technically feasible. Alternative employs conventional, reliable technologies.
Administrative feasibility	Not applicable	Administrative efforts in obtaining VPDES permits will be required for the discharge to surface water.	Administrative efforts in obtaining VPDES permits will be required for the discharge to surface water.
Availability of services and materials	Services and materials for sampling and analysis are readily available	Services and materials are readily available.	Services and materials are readily available.
5.0 Cost (Present Worth 30-yr @ 5%)	$118,400	$1,034,200	$1,097,300
6.0 Compliance with ARARs	Will not meet ARARs	Will meet ARARs	Will meet ARARs

TABLE 2-11 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-5 SANITARY AND STORM SEWER SYSTEMS
CAMERON STATION
ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER
7.0 Overall Protection of Human Health and Environment	Risks to human health from exposure to contaminated groundwater is currently low. However, potential off-site migration of contaminants in the future would result in increased risk to humans.	Risk to human health and the environment would be reduced since groundwater extraction and treatment would be provided.	Risk to human health and the environment would be reduced since groundwater extraction and treatment would be provided.
8.0 State Acceptance		Accepted	
9.0 Community Acceptance	No public comments	Alternative #2 was modified to include carbon treatment of the air discharge in response to comments from the Alexandria Health Department.	

TABLE 2-12
SUMMARY OF DETAILED ANALYSIS
OU-6 ACID PITS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#4 EXCAVATION AND OFF-SITE THERMAL OXIDATION AND SOLIDIFICATION
1.0 Short-Term Effectiveness		
Protection of workers during remedial actions	Not applicable	Potential exposure during excavation can be mitigated by personal protection and dust control.
Environmental impacts	Negligible	Available methods will minimize potential risk from emissions in an off-site thermal treatment facility.
Time until action is completed (after ROD signing)	Existing risk remains	< 1 month
2.0 Long-Term Effectiveness and Performance		
Magnitude of residual risks	Existing risk from potential groundwater ingestion and incidental ingestion of contaminated soil will continue.	Site specific clean-up goals will be achieved.
Adequacy of control	Not applicable	Off-site thermal treatment and solidification demonstrated to be effective.
Reliability of controls	Not applicable	Methods employed are generally reliable with a low probability of failure.

TABLE 2-12 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-6 ACID PITS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#4 EXCAVATION AND OFF-SITE THERMAL OXIDATION AND SOLIDIFICATION
3.0 Reduction of Toxicity, Mobility or Volume, (TMV)	No reduction in TMV	Incineration will destroy the toxicity and volume of organics, and solidification process will reduce the mobility of metals.
4.0 Implementability		
Technical feasibility	Not applicable	Incineration to destroy organics and solidification to immobilize metals are proven technologies.
Administrative feasibility	Not applicable	DOT manifesting necessary. No permits required for on-site work. Coordination between EPA and state necessary.
Availability of services and materials	Not applicable	Several off-site incinerators are available. Other services and equipment are locally available.
5.0 Cost (Present Worth 30-Yr @ 5%)	$0	$44,600
6.0 Compliance with ARARs	Will not meet ARARs	Will meet ARARs

TABLE 2-12 (continued)
SUMMARY OF DETAILED ANALYSIS
OU-6 ACID PITS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE		#1 NO ACTION	#4 EXCAVATION AND OFF-SITE THERMAL OXIDATION AND SOLIDIFICATION
7.0	Overall Protection of Human Health and Environment	Not protective	Will achieve clean-up goals and thus be protective
8.0	State Acceptance		Accepted
9.0	Community Acceptance	No public comments	

TABLE 2-13 SUMMARY OF DETAILED ANALYSIS OU-8
PX SERVICE STATION AND BUILDING 2 UNDERGROUND STORAGE TANKS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER	#4 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING AND IN-SITU BIOREMEDIATION
1.0 Short Term Effectiveness				
Protection of workers during remedial actions	Not applicable.	Low risks assuming adequate personal protection for workers is provided.	Low risks assuming adequate personal protection for workers is provided.	Low risks assuming adequate personal protection for workers is provided.
Environmental impacts	Short-term risks due to groundwater are presently low.	Potential health risks associated with contaminant air emissions resulting from the water treatment process are anticipated to be low. However, if the risk becomes high, additional air emissions controls can be implemented.	Minimal risks to community during implementation.	Minimal risks to community during implementation. Potential health risks associated with contaminant air emissions resulting from the water treatment process are anticipated to be low.
Time until action is completed (after ROD signing)	The remedial action objectives for groundwater will not be achieved.	Approximately 15 to 17 years.	Approximately 15 to 17 years.	Approximately 10 years.

TABLE 2-13 (continued) SUMMARY OF DETAILED ANALYSIS
OU-8 PX SERVICE STATION AND BUILDING 2 UNDERGROUND STORAGE TANKS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER	#4 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING AND IN-SITU BIOREMEDIATION
2.0 Long-Term Effectiveness and Performance				
Magnitude of residual risks	The long-term risks to human health and the environment will be the same as the current risk. The contaminated ground-water is projected to migrate downgradient.	Long-term risk associated with the treated groundwater will be reduced by the air stripping system.	Spent carbon will be regenerated off-site, therefore no long-term risks will be associated with this alternative.	In-situ microbial reactions will convert organic contaminants into simpler and less toxic compounds, thus eliminating the long-term risks associated with contaminated groundwater.
Adequacy of control	Not applicable.	Methods employed are generally conventional and effective.	Methods employed are generally conventional and effective.	Under optimum operational conditions, methods employed are generally effective.
Reliability of controls	Not applicable.	Groundwater extraction and air stripping treatment are adequate and reliable methods of remediating volatile organic contaminated groundwater.	Groundwater extraction and carbon adsorption treatment are adequate and reliable methods of remediating volatile organic contaminated groundwater.	With the exception of unpredictable microbial activity, methods employed are relatively reliable with a low probability of failure.

TABLE 2-13 (continued) SUMMARY OF DETAILED ANALYSIS
OU-8 PX SERVICE STATION AND BUILDING 2 UNDERGROUND STORAGE TANKS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER	#4 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING AND IN-SITU BIOREMEDIATION
3.0 Reduction of Toxicity, Mobility or Volume, (TMV)	No reduction in TMV	The air stripping will effectively remove contaminants in groundwater but will not reduce the toxicity, mobility or volume of contaminants. Groundwater treatment will be irreversible.	Volume and mobility reduction will be achieved by concentrating organic contaminants on the carbon surface. Toxicity reduction will also be achieved if the carbon is thermally regenerated, thereby destroying the contaminants.	This alternative will effectively reduce the toxicity and volume of contaminants in ground-water through in-situ biological reactions.
4.0 Implementability				
Technical feasibility	Not applicable.	Technically feasible. Alternative employs conventional, reliable technologies.	Technically feasible. Alternative employs conventional, reliable technologies.	Technically feasible. Alternative employs conventional, reliable technologies.
Administrative feasibility	Not applicable.	Administrative efforts in obtaining VPDES permits will be required for the discharge to surface water.	Administrative efforts in obtaining VPDES permits will be required for the discharge to surface water.	Administrative efforts in obtaining approval for the injection-recapture system required by this alternative.
Availability of services and materials	Services and materials for sampling and analysis are readily available.	Services and materials are readily available.	Services and materials are readily available.	Services and materials are readily available.

TABLE 2-13 (continued) SUMMARY OF DETAILED ANALYSIS
OU-8 PX SERVICE STATION AND BUILDING 2 UNDERGROUND STORAGE TANKS
CAMERON STATION, ALEXANDRIA, VIRGINIA

ALTERNATIVE	#1 NO ACTION	#2 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING SYSTEM AND DISCHARGE TO SURFACE WATER	#3 GROUNDWATER COLLECTION FOLLOWED BY LIQUID PHASE CARBON ABSORPTION AND DISCHARGE TO SURFACE WATER	#4 GROUNDWATER COLLECTION FOLLOWED BY AIR STRIPPING AND IN-SITU BIOREMEDIATION
5.0 Cost (Present Worth @ 5%)	$118,400 (for 30 years)	$750,200 (for 17 years)	$2,115,800 (for 17 years)	$935,400 (for 10 years)
6.0 Compliance with ARARs	Will not meet ARARs	Will meet ARARs	Will meet ARARs	Will meet ARARs
7.0 Overall Protection of Human Health and Environment	This alternative will not protect human health or the environment from potential risks posed by the contaminated groundwater.	Risk to human health and the environment will be reduced since groundwater extraction and treatment will be provided.	Risk to human health and the environment will be reduced since groundwater extraction and treatment will be provided.	This alternative may provide more protection of human health and the environment because the contaminants will be degraded and the time required to achieve aquifer restoration will be faster than other alternatives.
8.0 State Acceptance	Alternative #4 is generally accepted by the state. However, this OU is being addressed under the supervision of DEQ's Water Division per VR 680-13-02, Sections 6.3, 6.4, 6.5 & 6.6. These regulations require a Corrective Action Plan (CAP) which will be implemented by the Army under a CAP permit after approval of the CAP by the State.			
9.0 Community Acceptance	No public comments			

TABLE 2-14: CHEMICAL SPECIFIC ARARs

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements				
OU No.	Description			Federal Standards		State Standards	Risk-based Cleanup Goals	Comments
1	PCB TRANSFORMER *PRA: Excavation and Off-Site Disposal in RCRA Landfill*	Soil	PCBs	EPA[a]	EPA[b]		RESIDENTIAL 0.053 mg/kg	Due to the inherent uncertainity in the risk assessment process, 1 mg/kg is adopted as the cleanup goal.
				RESIDENTIAL				
				1 mg/kg	10 mg/kg			
				INDUSTRIAL				
				10-25 mg/kg	25 mg/kg			
		Impermeable Solid Surface			10 $\mu g/100\ cm^2$			
				(1) Land Disposal Restrictions (LDR) (40 CFR Part 268); and (2) National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50)				
3	Landfill *PRA: Soil Capping and Monitoring the Landfill*	Soil and Groundwater	Metals (Silver and Cadmium)	Water RCRA MCLs for Cd: 10 $\mu g/L$ SDWA MCLs for Cd: 5 $\mu g/L$		Groundwater standard for Cd: 0.4 $\mu g/L$ Primary MCLs for Cd: 10 $\mu g/L$		Remediation is not required because of compliance with ARARs or no health risks.

TABLE 2-14: CHEMICAL SPECIFIC ARARs (Continued)

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements			
OU No.	Description			Federal Standards	State Standards	Risk-based Cleanup Goals	Comments
4	Pesticides Use and Storage Areas *PRA: Excavation and Off-Site Disposal in RCRA Landfill*	Soil	Dioxin (Pesticides)	(1) As per LDR (40 CFR Part 268), cleanup goal for dioxin containing wastes is less than 1 µg/l (TCLP); (2) As per EPA's ROD, [c] cleanup goal is 1 µg/kg; and (3) National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50)		0.0023 µg/kg	Based on EPAs guidance at Superfund site, the cleanup goal of 1 µg/kg is considered as the ARAR.

TABLE 2-14: CHEMICAL SPECIFIC ARARs (Continued)

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements			
OU No.	Description			Federal Standards	State Standards	Risk-based Cleanup Goals	Comments
5	Sanitary and Storm Sewer System *PRA: Groundwater Collection Followed by Air Stripping and Discharge to Surface Water (with Carbon Treatment of Air Discharge)*	Groundwater	Chlorinated Compounds	(1) LDR (40 CFR Part 268); (2) Safe Drinking Water Act (40 CFR Parts 141 and 143): MCLs in µg/L for TCE; 1,1,-DCE; benzene; and toluene are 5, 7, 5, and 1000 respectively	(1) Virginia State Water Control Law (Title 62-1, Chapter 3.1); (2) Virginia Miscelaneous Laws Relating to Water Pollution (Title 62-1, Chapter 20); (3) Virginia Groundwater Act (Title 62-1, Chapter 3.6); (4) Virginia Pollution Discharge Elimination System (VR680-14-01); (5) Virginia Pollutant Abatement Permit Program (VR 680-14-01); (6) Groundwater Standards (VR 680-21-04); (7) Emission Standards for Toxic Pollutants (Rules 4-3 and 5-3) (8) Primary MCL (µg/L) for TCE and 1,1,-DCE and benzene are 5, 7, and 5 respectively.		Remediation is required to comply with ARARs. Cleanup goals (in µg/L) for TCE, 1,1,-DCE, benzene and Toluene are 5,7,5, and 1000 respectively

TABLE 2-14: CHEMICAL SPECIFIC ARARs (Continued)

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements			
OU No.	Description			Federal Standards	State Standards	Risk-based Cleanup Goals	Comments
6	Acid Pits *PRA: Excavation and Off-Site Thermal Oxidation and Solidification*	Soil	Total petroleum hydrocarbons and lead	(1) Land Disposal Restrictions (LDR) (40 CFR Part 268); and (2) National Primary and Secondary Ambient Air Quality Standards (40 CFR Part 50) (3) Allowable lead concentrations (in mg/kg) in residential and industrial areas are 500 and 1000 respectively (EPA OSWER Directive 9355.4-02).	Action level for total petroleum hydrocarbons is 100 mg/kg (VR 680-13-02)		Remediation is required to comply with ARARs. Cleanup goal is 100 mg/kg.

Footnote:

a Guidance on Remedial Actions for Superfund Sites with PCB contamination, August 1990 (EPA-540/G-90/007)
b PCB Information Package, December 1991, US EPA, Region III
c US EPA Record of Decision for Dioxin-contaminated soil, Times Beach, Missouri (Septemeber 1988)

TABLE 2-15: ACTION SPECIFIC ARARs

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements		
OU No.	Description			Federal Standards	State Standards	Comments
1	PCB TRANSFORMER *PRA: Excavation and Off-Site Disposal in RCRA Landfill*	Soil Impermeable Solid Surface	PCBs	Criteria for classification of solid waste disposal facilities and practices (40 CFR Part 257)	Virginia Solid Waste Regulations-Special Wastes (VR 672-20-10, Part VII)	State regulation establishes disposal requirements for wastes containing PCBs.
				Standardards for owners and operators of hazardous waste treatment, storage, and disposal facilities (40 CFR Part 264) and Subparts B through E		
				Interim standards for owners and operators of hazardous waste treatment, storage and disposal facilities		
				Occupational Safety and Health Act (29USC Section 651-678)		
				Toxic Substances Control Act (TSCA)(13 USC Section 2601-2629)		
				Hazardous Materials Transportation Act (49 USC Section 1801-1813)		
3	Landfill	Soil and Groundwater	Metals (Silver and Cadmium)	Solid Waste Disposal Act, Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities (40 CFR Part 264) and Subparts B,C, and D	Virginia Solid Waste Regulations (VR 672-20-10)	

ACTION SPECIFIC ARARs (Continued)

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements		
OU No.	Description			Federal Standards	State Standards	Comments
	PRA: Soil Capping and Monitoring the Landfill			Interim Standards for Owners and Operators of Hazardous Waste Treatement, Storage and Disposal Facilities (40 CFR Part 265)	Virginia Hazardous Waste Management Regulations (Virginia Department of Waste Management, VR 672-10-01)	
4	Pesticides Use and Storage Areas *PRA: Excavation and Off-Site Disposal in RCRA Landfill*	Soil	Dioxin (Pesticides)	Hazardous Materials Transportation Act (49 USC Section 1801-1813)	Virginia Hazardous Waste Management Regulations (Virginia Department of Waste Management, VR 672-10-01)	
				Occupational Safety and Health Act (29USC Section 651-678)	Virginia Solid Waste Regulations (VR 672-20-10)	
				Standardards for owners and operators of hazardous waste treatment, storage, and disposal facilities (40 CFR Part 264) and Subparts B through E		
5	Sanitary and Storm Sewer System *PRA: Groundwater Collection Followed by Air Stripping and Discharge to Surface Water (with Carbon Treatment of Air Discharge)*	Groundwater	Chlorinated Compounds	Standardards for owners and operators of hazardous waste treatment, storage, and disposal facilities (40 CFR Part 264) and Subparts B through E	Virginia Solid Waste Regulations (VR 672-20-10)	
				Occupational Safety and Health Act (29USC Section 651-678)	Virginia Hazardous Waste Management Regulations (Virginia Department of Waste Management, VR 672-10-01)	
				National Pollutant Discharge Elimination System (40 CFR Parts 122, 125)		In addtional Federal regulations, local regulations also should be considered

ACTION SPECIFIC ARARs (Continued)

Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements		
OU No.	Description			Federal Standards	State Standards	Comments
				National Pretreatment Standards (40 CFR Part 403)		
				Clean Air Act National Ambient Air Quality Standards (40 CFR Parts 50, 52, 53, 60 and 61)		Emission to air has to be calculated and the need of compliance with National Ambient Air Quality Standards should be determined
6	Acid Pits *PRA: Excavation and Off-Site Thermal Oxidation and Solidification*	Soil	Total petroleum hydrocarbons and lead	Standardards for owners and operators of hazardous waste treatment, storage, and disposal facilities (40 CFR Part 264) and Subparts B through E	Virginia Hazardous Waste Management Regulations (Virginia Department of Waste Management, VR 672-10-01)	
				Occupational Safety and Health Act (29USC Section 651-678)	Virginia Solid Waste Regulations (VR 672-20-10)	
				Hazardous Materials Transportation Act (49 USC Section 1801-1813)		

TABLE 2-16: LOCATION SPECIFIC ARARs

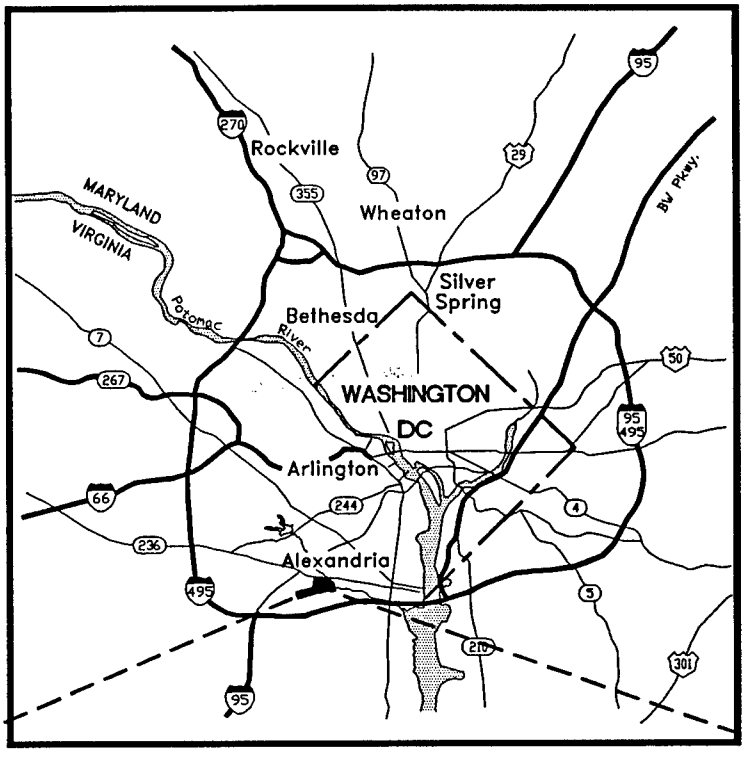
Operable Unit (OU) and Preferred Remedial Alternative (PRA)		Media	Contaminant of Concern	Applicable or Relevant and Appropriate Requirements			
OU No.	Description			Federal Standards	State Standards	Risk-based Cleanup Goals	Comments
1	PCB TRANSFORMER *PRA: Excavation and Off-Site Disposal in RCRA Landfill*	Soil Impermeable Solid Surface	PCBs				
3	Landfill *PRA: Soil Capping and Monitoring the Landfill*	Soil and Groundwater	Metals (Silver and Cadmium)				
4	Pesticides Use and Storage Areas *PRA: Excavation and Off-Site Disposal in RCRA Landfill*	Soil	Dioxin (Pesticides)				
5	Sanitary and Storm Sewer System *PRA: Groundwater Collection Followed by Air Stripping and Discharge to Surface Water (with Carbon Treatment of Air Discharge)*	Groundwater	Chlorinated Compounds	Executive Order on Flood Plain Management (Executive Order No. 11,988) (40CFR Part 6, Subpart A)	City of Alexandria Ordinance required by the Chesapeake Bay Ct (Ordinance No. 3558)		
6	Acid Pits *PRA: Excavation and Off-Site Thermal Oxidation and Solidification*	Soil	Total petroleum hydrocarbons and lead				

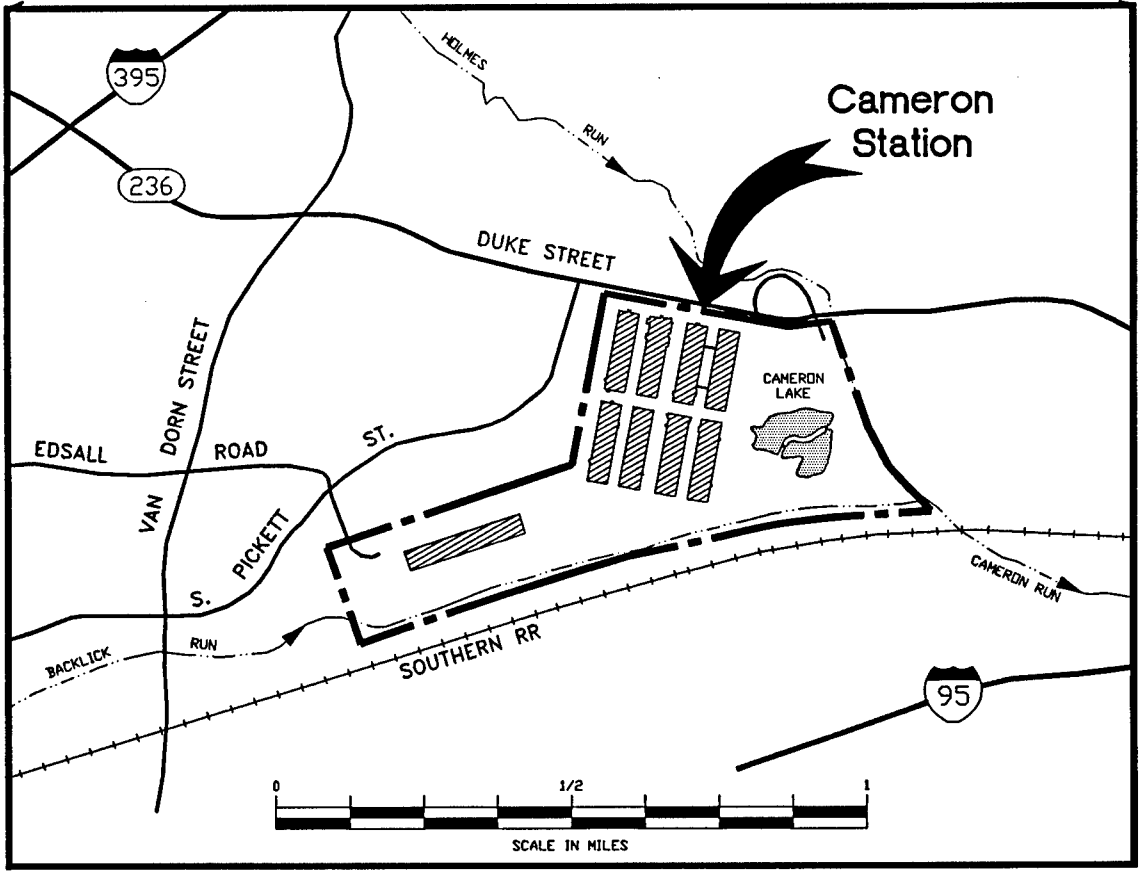
TABLE 2-17

CLEANUP GOALS FOR SOIL/SOLID WASTE IN CAMERON STATION	
CHEMICAL	CONCENTRATION
PCB (Soil)	Less than 1 mg/kg
PCB (Solid impervious surfaces - wipe)	10 ug/100 cm^2
Dieldrin	0.057 mg/kg
Dioxin	0.001 mg/kg
Lead	500 mg/kg
Total Petroleum Hydrocarbons	100 mg/kg

TABLE 2-18 CLEANUP GOALS FOR GROUNDWATER

Chemical	Cleanup Goal (μg/L)
Lead	15
Zinc	50
Cadmium	0.4
Chlordane	0.01
Heptachlor	0.001
Trichloroethylene (TCE)	5
1,1-dichloroethylene (1,1-DCE)	7
Benzene	5
Toluene	1000





CLIENT	US Army Toxic and Hazardous Materials Agency			
PROJ	Cameron Station, Virginia			
REVISION NO		DES BY		
SCALE	AS SHOWN	DR BY	L.A.L.	6-23-92
FILE NAME	CAMSTA\LOCMAP.dwg	CHK BY	F.S.A.	6-25-92

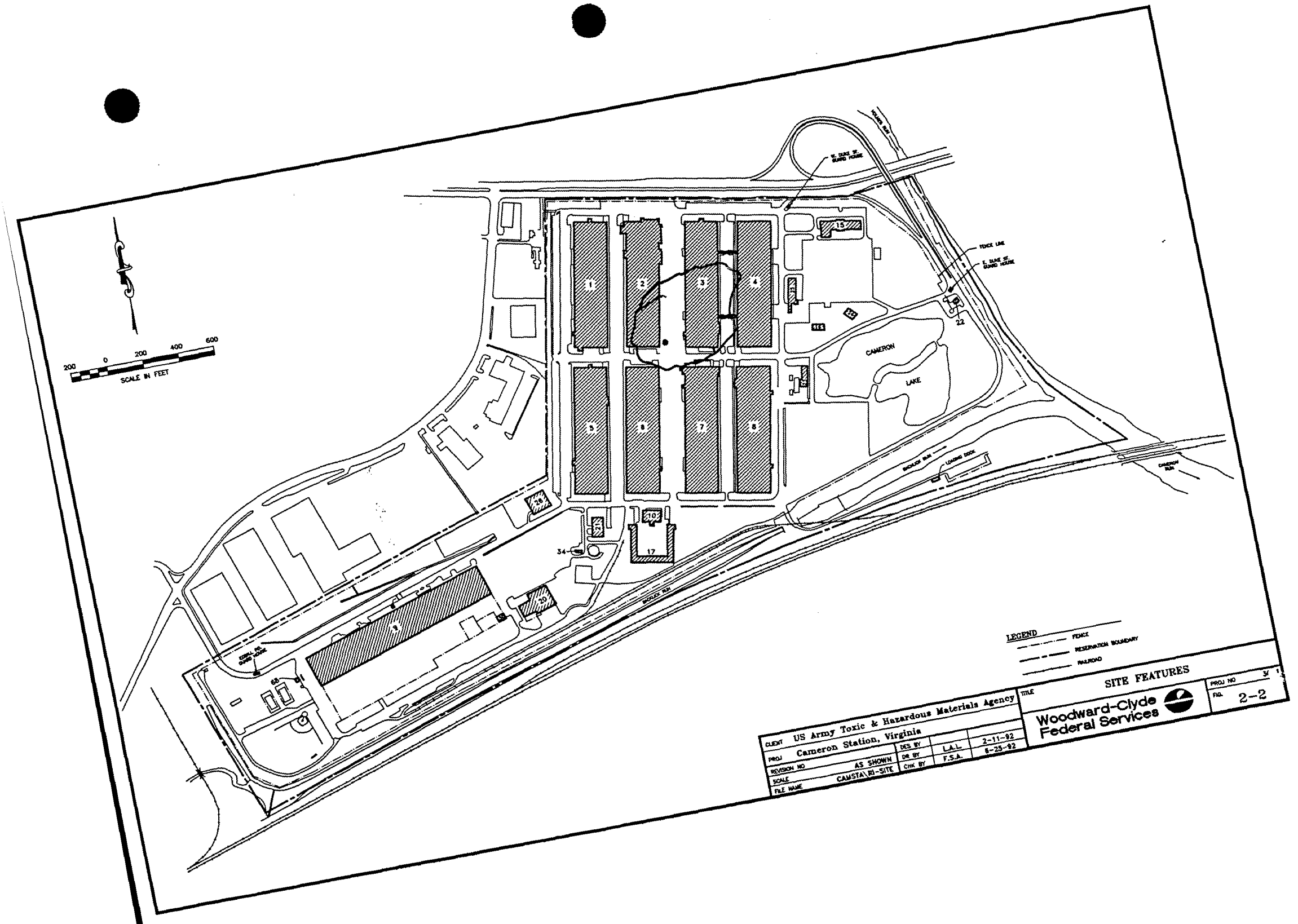
TITLE

LOCATION MAP

Woodward-Clyde Federal Services

PROJ NO 3001

FIG 2-1


200 0 200 400 600
SCALE IN FEET
1
2
3
4
5
6
7
8
9
10
11
12
13
15
16
17
18
19
20
22
34
CAMERON
LAKE
FENCE LINE
LEGEND
FENCE
RESERVATION BOUNDARY
RAILROAD
CLIENT US Army Toxic & Hazardous Materials Agency
PROJ Cameron Station, Virginia
REVISION NO
SCALE AS SHOWN
FILE NAME CAMSTA\RI-SITE
DES BY L.A.L. 2-11-92
DR BY F.S.A. 8-25-92
CHK BY
TITLE SITE FEATURES
Woodward-Clyde Federal Services
PROJ NO
FIG. 2-2

3.1 OVERVIEW

The public reaction to the preferred alternatives during the public comment period was positive although one commenter recommended that the Army consider Alternative 5-3 instead of 5-2 for OU-5. Only three people had questions or comments regarding the Proposed Plan during the public comment period.

3.2 BACKGROUND AND COMMUNITY INVOLVEMENT

General community interest in Cameron Station has been minimal. Army and Federal regulations require public involvement in the RI/FS process. As a result, community interviews were conducted in August 1992. A total of 18 persons throughout the local community were interviewed through the use of a questionnaire. Information obtained from the interviews was used to develop a Public Involvement and Response Plan.

Notices of public comment period were placed in four local newspapers on March 4 and April 15, 1993. The comment period to review the Proposed Plan was established from March 4, through April 3, 1993. The comment period was ultimately extended an additional 30 days to May 3, 1993 at the request of a commenter.

3.3 SUMMARY OF PUBLIC COMMENTS AND AGENCY RESPONSE

The following is a summary of the questions/comments raised during the 60-day public comment period and how the Army has addressed these issues:

(1) The Alexandria Health Department requested that the 30-day public comment period be extended.

Army response: The comment period was extended 30 additional days.

(2) In addition, the Health Department wanted the Army to reconsider

(2) In addition, the Health Department wanted the Army to reconsider the use of Alternative 5-2 for OU-5 and replace it with Alternative 5-3. They were concerned about volatiles being released to the air during the treatment of the contaminated groundwater.

Army response: The U.S. Army Environmental Center (USAEC) forwarded a letter of response to the Health Department indicating that the Army had reconsidered and would change the method of cleanup to Alternative 5-3. Subsequent to that letter, it was determined that the same level of protectiveness would be achieved by adding carbon treatment to the air discharge from the Alternative 5-2 air stripper, while still providing a cost savings over Alternative 5-3. The USAEC discussed this option and received the Health Department's concurrence that Alternative 5-2 with the addition of carbon treatment of the air discharge would be selected.

(3) Commenter wanted to know how to place a bid to perform restoration.

Army response: USAEC informed commenter to call a point of contact at the Baltimore District Corps of Engineers since they would be performing all remediation at Cameron Station.

(4) Commenter wanted to know if USAEC could conduct a public meeting and focus on redevelopment.

Army response: USAEC informed commenter that a public meeting could be held, however only environmental issues presented in the Proposed Plan would be discussed. Commenter was given a point of contact at the office of Director of Planning and Community Development for the City of Alexandria and also the real estate point of contact for the Baltimore District Corps of Engineers to discuss redevelopment issues. Commenter no longer requested a public meeting.

(5) Commenter stated that all environmental risks associated with the contamination

at Cameron Station should be eliminated and that cleanup of contamination should be performed according to regulatory standards.

Army response: USAEC forwarded a letter to the commenter assuring this person that all remediation would be conducted according to applicable regulatory cleanup standards and performed consistent with the approach defined in the Proposed Plan.

Agency for Toxic Substances and Disease Registry (ATSDR). 1990a. Toxicological Profile for Aluminum (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1990b. Toxicological Profile for Carbon Disulfide (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1990c. Toxicological Profile for Cobalt (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1991a. Toxicological Profile for Arsenic (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1991b. Toxicological Profile for Cadmium (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1991c. Toxicological Profile for Di(2-ethylhexyl)phthalate (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1991d. Toxicological Profile for Lead (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1991e. Toxicological Profile for Nickel (Draft), Atlanta, Georgia.

Agency for Toxic Substances and Disease Registry (ATSDR). 1991f. Toxicological Profile for Selected PCBs (Draft), Atlanta, Georgia

Agency for Toxic Substances and Disease Registry (ATSDR). 1991g. Toxicological Profile for Trichloroethylene (Draft), Atlanta, Georgia.

Cowherd, C., Muleski, G.E., Englehart, P.J., Gillette, D.A. 1985. Midwest Research Institute, Rapid Assessment of Exposure to Particulate Emissions From Surface Contamination Sites, No. EPA/600/8-85/002, Washington, D.C.

Hanna, S.R., Briggs, G.A., Hosker, R.P., Jr. 1982. Handbook on Atmospheric Diffusion, U.S. Department of Energy, Oak Ridge, Tennessee.

ICF Technology Incorporated. 1990a. Cameron Station Remedial Investigation Sampling Design Plan, Final Document, Task Order No. 10, RI/FS Contract No. DAAA15-88-D-0009.

Life Systems, Inc. 1992. Detailed Alternative Evaluation Report. Prepared under Program 1594, Subcontract No.6 under Prime Contract No. DAAA15-90-D-0010 for Woodward-Clyde Federal Services. July 30, 1992.

Shen, T. 1981. Estimating Hazardous Air Emissions From Disposal Sites. Pollution Engineering. 13(8):31-34.

Turner, D.B. 1970. Workbook of Atmospheric Dispersion Estimates, Revised, US. Department of Health, Education and Welfare, Public Health Service, Cincinnati, Ohio.

U.S. Army Corps of Engineers. 1991. Baltimore District. Draft Environmental Impact Statement, Comprehensive Base Realignment/Closure and Fort Belvoir Development, Baltimore, MD.

U.S. EPA. 1988. Superfund Exposure Assessment Manual, EPA/540/1-88/001, Washington, D.C.

U.S. EPA. 1989a. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A), Interim Final, EPA/540/89/002, Washington, D.C.

U.S. EPA. 1989b. Exposure Factors Handbook, EPA/600/8-89/043, Washington, D.C.

U.S. EPA. 1989c. RCRA Facility Investigation (RFI) Guidance, Volume I of IV, Development of an RFI Work Plan and General Considerations for RCRA Facility Investigations, EPA/530/SW-89-031, Washington, D.C.

U.S. EPA. 1989d. Guidance on Preparing Superfund Decision Documents, Interim Final, EPA/540/6-89/007, Washington, D.C.

U.S. EPA. 1990. Guidance for Data Useability in Risk Assessment, Interim Final, EPA/540/G-90/008, Washington, D.C.

U.S. EPA. 1991a. Health Effects Assessment Summary Tables, Fourth Quarter FY1991, OERR 9200.6-303 (91-4), Washington, D.C.

U.S. EPA. 1991b. Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A),, Supplemental Guidance, "Standard Default Exposure Factors," Interim Final, OSWER Directive 9285.6-03, Washington, D.C.

U.S. EPA. 1992a. Integrated Risk Information System (IRIS).

U.S. EPA. 1992b. Dermal Exposure Assessment: Principles and Applications. EPA/600/8-91/011B, Washington, D.C.

U.S. EPA. 1992c. Region IV Memorandum dated February 11, 1992, Atlanta, Georgia.

Woodward-Clyde Federal Services. 1993a. Cameron Station Remedial Investigation Final Report, Volume I through IV. Prepared for under Delivery Order 0001, Contract DAAA15-90-D-0010.

Woodward-Clyde Federal Services. 1993b. Cameron Station Feasibility Study Final Reports. Prepared for under Delivery Order 0001, Contract DAAA15-90-D-0010.

APPENDIX A

GLOSSARY

APPENDIX A
GLOSSARY

Applicable or Relevant and Appropriate Requirements (ARARs): The federal and state requirements that a selected remedy must attain. These requirements may vary among sites and alternatives.

Benzene: A volatile organic compound associated with gasoline; also used as a solvent.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or Superfund: A federal law passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act. The Act created a trust fund, known as Superfund, to investigate and cleanup abandoned or uncontrolled hazardous waste sites.

Decision Document (DD): A document that describes the final remedial actions selected for a site, why the remedial actions were chosen and others not, how much they will cost, and how the public responded.

1, 2-Dichloroethane: A volatile organic compound associated with solvents; sometimes used as a gasoline additive.

Groundwater: Water found beneath the earth's surface in geologic formations that are fully saturated. When it occurs in sufficient quantity, groundwater can be used as a water supply.

Interim Remedial Action (IRA): An agreement between the State Agency and the owner(s) of a site for rapid response action to control or reduce the spread of contamination.

Operable Unit: A portion of a site that has been conceptually separated from the rest of the site to allow for easier management.

Polychlorinated Biphenyls (PCBs): A semi-volatile organochlorine compound used in dielectric fluids for their insulating and non-degradational properties.

Present Worth: A term used to indicate the discounting of sums to be received in the future to their present value equivalent, or the amount which will accumulate to that sum if invested at assumed interest rates.

Remedial Design (RD): Preparation of plans and specifications so that the selected remedial actions for a site can be constructed or implemented.

Remedial Investigation/Feasibility Study (RI/FS): A two-part study of a hazardous waste site that supports the selection of a remedial action for a site. The first part, the RI, identifies the nature and extent of contamination at the site. The second part, the FS, identifies and evaluates alternatives for addressing site contamination.

Trichloroethene: A volatile organic compound commonly associated with solvents.

Volatile Organic Compounds (VOCs): Organic liquids that readily evaporate under atmospheric conditions. Example compounds include trichloroethene (TCE) and benzene.

APPENDIX B

EXPOSURE POINT CONCENTRATIONS OF CHEMICALS OF POTENTIAL CONCERN AT CAMERON STATION

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-1

EXPOSURE POINT: CAMERON LAKE
MEDIUM: SURFACE WATER
UNITS: MG/L
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	7	4.2E-05	4.2E-05	4.2E-05	0.0E+00	4.2E-05	4.2E-05
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	7	4.7E-05	4.7E-05	4.7E-05	0.0E+00	4.7E-05	4.7E-05
3	ACENAPHTHENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
4	ACETONE	0	7	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03
5	ALPHA CHLORDANE	0	7	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05
6	ALUMINUM	0	7	5.4E-02	5.4E-02	5.4E-02	0.0E+00	5.4E-02	5.4E-02
7	ANTHRACENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
8	ARSENIC	0	7	3.0E-03	3.0E-03	3.0E-03	0.0E+00	3.0E-03	3.0E-03
9	BARIUM	6	7	2.9E-02	1.0E-02	2.5E-02	6.7E-03	2.9E-02	2.9E-02 *
10	BENZO (a) ANTHRACENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
11	BENZO (a) PYRENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
12	BENZO (b) FLUORANTHENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
13	BENZO (k) FLUORANTHENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
14	BENZOIC ACID	0	7	2.5E-02	5.0E-03	1.1E-02	9.7E-03	1.8E-02	1.8E-02
15	BERYLLIUM	0	7	1.3E-03	1.3E-03	1.3E-03	0.0E+00	1.3E-03	1.3E-03
16	BIS (2-ETHYLHEXYL) PHTHALATE	1	7	1.3E-02	5.0E-03	6.3E-03	3.0E-03	8.5E-03	8.5E-03
17	CADMIUM	1	7	7.1E-03	2.5E-03	3.2E-03	1.8E-03	4.4E-03	4.4E-03
18	CHLORIDE	6	7	7.7E+01	1.3E+01	6.1E+01	2.2E+01	7.7E+01	7.7E+01 *
19	CHROMIUM	0	7	7.5E-03	7.5E-03	7.5E-03	0.0E+00	7.5E-03	7.5E-03
20	CHRYSENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
21	COBALT	0	7	1.3E-02	1.3E-02	1.3E-02	0.0E+00	1.3E-02	1.3E-02
22	ENDOSULFAN SULFATE	0	7	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05
23	FLUORANTHENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
24	FLUORENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
25	FLUORIDE	2	7	2.0E-01	1.4E-01	1.8E-01	2.9E-02	2.1E-01	1.4E-01 *
26	GAMMA-CHLORDANE	0	7	2.3E-05	2.3E-05	2.3E-05	0.0E+00	2.3E-05	2.3E-05
27	INDENO (1,2,3-c,d) PYRENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
28	LEAD	1	7	1.6E-03	6.3E-04	7.6E-04	3.6E-04	1.0E-03	1.0E-03
29	MERCURY	0	7	3.7E-04	3.7E-04	3.7E-04	0.0E+00	3.7E-04	3.7E-04
30	NICKEL	0	7	3.2E-02	3.2E-02	3.2E-02	0.0E+00	3.2E-02	3.2E-02
31	NITRATE	7	7	5.7E-01	2.2E-01	4.0E-01	1.1E-01	4.8E-01	4.8E-01
32	NITRITE	0	7	5.5E-03	5.5E-03	5.5E-03	0.0E+00	5.5E-03	5.5E-03
33	PCB 1260	0	7	1.8E-04	5.0E-05	6.8E-05	4.7E-05	1.0E-04	1.0E-04
34	PHENANTHRENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
35	PYRENE	0	7	6.0E-03	5.0E-03	5.1E-03	3.8E-04	5.4E-03	5.4E-03
36	SILVER	1	7	8.2E-04	2.5E-04	3.3E-04	2.1E-04	4.9E-04	4.9E-04
37	SULFATE	7	7	1.3E+01	2.9E+00	1.1E+01	3.8E+00	1.4E+01	1.3E+01 *

DATA STATISTICS

DATE: 06/09/92
FILE: STAT-2

EXPOSURE POINT: CAMERON LAKE
MEDIUM: SEDIMENT
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	10	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	10	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
3	ACENAPHTHENE	1	10	6.4E-01	1.7E-01	2.1E-01	1.5E-01	3.0E-01	3.0E-01
4	ACETONE	0	10	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01
5	ALUMINUM	10	10	9.3E+03	6.9E+02	3.5E+03	2.4E+03	4.9E+03	4.9E+03
6	ANTHRACENE	1	10	9.6E-01	1.7E-01	2.4E-01	2.5E-01	3.9E-01	3.9E-01
7	ARSENIC	1	10	2.7E+01	6.4E+00	8.4E+00	6.6E+00	1.2E+01	1.2E+01
8	BARIUM	10	10	1.0E+02	2.4E+01	5.3E+01	2.8E+01	6.9E+01	6.9E+01
9	BENZO [a] ANTHRACENE	3	10	2.0E+00	1.7E-01	4.8E-01	6.1E-01	8.3E-01	8.3E-01
10	BENZO [a] PYRENE	2	10	1.7E+00	1.7E-01	3.9E-01	5.2E-01	7.0E-01	7.0E-01
11	BENZO [b] FLUORANTHENE	3	10	2.0E+00	1.7E-01	5.3E-01	6.6E-01	9.1E-01	9.1E-01
12	BENZO [k] FLUORANTHENE	3	10	2.0E+00	1.7E-01	4.9E-01	6.4E-01	8.6E-01	8.6E-01
13	BENZOIC ACID	1	10	8.0E-01	1.7E-01	2.3E-01	2.0E-01	3.4E-01	3.4E-01
14	BERYLLIUM	10	10	1.8E+01	4.6E-01	2.7E+00	5.5E+00	5.9E+00	5.9E+00
15	BIS (2-ETHYLHEXYL) PHTHALATE	3	10	2.1E+00	1.7E-01	5.8E-01	7.7E-01	1.0E+00	1.0E+00
16	CADMIUM	1	10	1.2E+00	2.1E-01	3.1E-01	3.2E-01	5.0E-01	5.0E-01
17	CHROMIUM	10	10	1.3E+02	3.5E+00	2.5E+01	3.7E+01	4.7E+01	4.7E+01
18	CHRYSENE	3	10	2.4E+00	1.7E-01	5.7E-01	7.5E-01	1.0E+00	1.0E+00
19	COBALT	8	10	2.1E+01	1.3E+00	1.0E+01	6.2E+00	1.4E+01	1.4E+01
20	ENDOSULFAN SULFATE	0	10	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
21	FLUORANTHENE	4	10	4.6E+00	1.7E-01	9.9E-01	1.4E+00	1.8E+00	1.8E+00
22	FLUORENE	1	10	7.5E-01	1.7E-01	2.2E-01	1.8E-01	3.3E-01	3.3E-01
23	INDENO [1,2,3-c,d] PYRENE	1	10	7.3E-01	1.7E-01	2.2E-01	1.8E-01	3.2E-01	3.2E-01
24	LEAD	8	10	3.1E+02	5.0E+00	8.0E+01	9.9E+01	1.4E+02	1.4E+02
25	MERCURY	0	10	4.4E-02	4.4E-02	4.4E-02	0.0E+00	4.4E-02	4.4E-02
26	NICKEL	1	10	1.8E+01	3.8E+00	5.2E+00	4.5E+00	7.8E+00	7.8E+00
27	PCB 1260	0	10	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
28	PHENANTHRENE	4	10	3.8E+00	1.7E-01	8.3E-01	1.2E+00	1.5E+00	1.5E+00
29	PYRENE	4	10	4.7E+00	1.7E-01	9.7E-01	1.5E+00	1.8E+00	1.8E+00
30	SILVER	0	10	5.1E-01	5.1E-01	5.1E-01	0.0E+00	5.1E-01	5.1E-01

DATA STATISTICS

DATE: 06/09/92
FILE: STAT-3

EXPOSURE POINT: CAMERON LAKE
MEDIUM: FISH TISSUE
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	2	2	1.1E-01	4.0E-02	7.3E-02	4.8E-02	2.9E-01	1.1E-01	*
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	2	2	1.3E-01	1.2E-01	1.3E-01	7.1E-03	1.6E-01	1.3E-01	*
3	ALPHA CHLORDANE	2	2	2.8E-02	4.5E-03	1.6E-02	1.7E-02	9.1E-02	2.8E-02	*
4	ALUMINUM	1	2	1.9E+01	7.5E+00	1.3E+01	8.4E+00	5.1E+01	1.9E+01	*
5	ARSENIC	0	2	1.1E+00	1.1E+00	1.1E+00	0.0E+00	1.1E+00	1.1E+00	
6	BARIUM	1	2	2.9E+00	1.3E+00	2.1E+00	1.1E+00	7.1E+00	2.9E+00	*
7	BERYLLIUM	0	2	3.9E-02	3.9E-02	3.9E-02	0.0E+00	3.9E-02	3.9E-02	
8	CADMIUM	0	2	2.1E-01	2.1E-01	2.1E-01	0.0E+00	2.1E-01	2.1E-01	
9	CHROMIUM	1	2	6.2E+00	2.0E+00	4.1E+00	3.0E+00	1.8E+01	6.2E+00	*
10	COBALT	2	2	2.2E+00	1.7E+00	1.9E+00	3.6E-01	3.5E+00	2.2E+00	*
11	ENDOSULFAN SULFATE	0	1	2.3E-02	2.3E-02	2.3E-02	0.0E+00	ERR	2.3E-02	*
12	GAMMA-CHLORDANE	2	2	3.0E-02	5.8E-03	1.8E-02	1.7E-02	9.4E-02	3.0E-02	*
13	LEAD	0	2	2.7E-01	2.7E-01	2.7E-01	0.0E+00	2.7E-01	2.7E-01	
14	MERCURY	1	2	5.1E-02	1.3E-02	3.2E-02	2.7E-02	1.5E-01	5.1E-02	*
15	NICKEL	1	2	4.0E+00	1.2E+00	2.6E+00	1.9E+00	1.1E+01	4.0E+00	*
16	PCB 1260	2	2	1.8E-01	1.7E-01	1.7E-01	7.1E-03	2.0E-01	1.8E-01	*
17	SILVER	0	2	4.3E-02	4.3E-02	4.3E-02	0.0E+00	4.3E-02	4.3E-02	

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-4

EXPOSURE POINT: LANDFILL
MEDIUM: SURFACE SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
3	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
4	2-METHYLNAPHTHALENE	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
5	ACENAPHTHENE	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
6	ACETONE	0	3	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	
7	ALUMINUM	3	3	4.6E+03	1.4E+03	3.0E+03	1.6E+03	5.7E+03	4.6E+03	*
8	ANTHRACENE	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
9	BARIUM	3	3	8.2E+01	1.7E+01	5.4E+01	3.3E+01	1.1E+02	8.2E+01	*
10	BENZENE	0	3	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	
11	BENZO [a] ANTHRACENE	3	3	2.1E+00	5.5E-01	1.2E+00	8.3E-01	2.6E+00	2.1E+00	*
12	BENZO [a] PYRENE	3	3	8.5E-01	4.8E-01	6.9E-01	1.9E-01	1.0E+00	8.5E-01	*
13	BENZO [b] FLUORANTHENE	3	3	8.5E-01	7.0E-01	7.8E-01	7.6E-02	9.1E-01	8.5E-01	*
14	BENZO [g,h,i] PERYLENE	1	3	4.1E-01	1.7E-01	3.0E-01	1.2E-01	5.1E-01	4.1E-01	*
15	BENZO [k] FLUORANTHENE	3	3	8.5E-01	5.6E-01	7.5E-01	1.6E-01	1.0E+00	8.5E-01	*
16	BERYLLIUM	2	3	1.3E+00	1.3E-01	7.8E-01	6.1E-01	1.8E+00	1.3E+00	*
17	BIS (2-ETHYLHEXYL) PHTHALATE	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
18	CHROMIUM	3	3	1.5E+01	6.4E+00	1.0E+01	4.4E+00	1.8E+01	1.5E+01	*
19	CHRYSENE	3	3	1.1E+00	8.2E-01	9.2E-01	1.3E-01	1.1E+00	1.1E+00	*
20	COBALT	3	3	1.4E+01	6.2E+00	1.0E+01	3.8E+00	1.7E+01	1.4E+01	*
21	DIBENZOFURAN	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
22	DIELDRIN	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
23	ENDOSULFAN SULFATE	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
24	ENDRIN KETONE	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
25	ETHYLBENZENE	0	3	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	
26	FLUORANTHENE	2	3	1.9E+00	1.7E-01	1.2E+00	9.4E-01	2.8E+00	1.9E+00	*
27	FLUORENE	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
28	HEPTACHLOR	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
29	HEPTACHLOR EPOXIDE	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
30	INDENO [1,2,3-c,d] PYRENE	1	3	5.2E-01	1.7E-01	3.4E-01	1.8E-01	6.3E-01	5.2E-01	*
31	LEAD	3	3	6.7E+01	1.9E+01	4.6E+01	2.4E+01	8.7E+01	6.7E+01	*
32	METHYLISOBUTYL KETONE	0	3	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	
33	MOLYBDENUM	0	3	2.0E+00	2.0E+00	2.0E+00	0.0E+00	2.0E+00	2.0E+00	
34	NAPHTHALENE	0	3	3.3E-01	1.7E-01	2.2E-01	9.5E-02	3.8E-01	3.3E-01	*
35	NICKEL	0	3	3.8E+00	3.8E+00	3.8E+00	0.0E+00	3.8E+00	3.8E+00	
36	PCB 1260	0	3	1.7E+00	8.5E-01	1.1E+00	4.9E-01	2.0E+00	1.7E+00	*
37	PHENANTHRENE	2	3	1.9E+00	1.7E-01	1.0E+00	8.7E-01	2.5E+00	1.9E+00	*
38	PYRENE	3	3	2.1E+00	5.5E-01	1.3E+00	7.9E-01	2.7E+00	2.1E+00	*
39	TOLUENE	0	3	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	
40	VANADIUM	0	3	1.5E+01	6.3E+00	1.0E+01	4.4E+00	1.7E+01	1.5E+01	*
41	XYLENES, TOTAL COMBINED	0	3	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	

DATA STATISTICS

DATE: [redacted]1/92
FILE: STAT-5

EXPOSURE POINT: SERVICE ROAD
MEDIUM: SURFACE SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
3	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
4	2-METHYLNAPHTHALENE	0	6	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01
5	ACENAPHTHENE	1	6	8.8E-01	1.7E-01	2.8E-01	2.9E-01	5.2E-01	5.2E-01
6	ACETONE	0	6	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01
7	ALUMINUM	6	6	7.0E+03	2.8E+03	4.6E+03	1.7E+03	6.0E+03	6.0E+03
8	ANTHRACENE	1	6	1.4E+00	1.7E-01	3.7E-01	5.0E-01	7.8E-01	7.8E-01
9	BARIUM	6	6	9.3E+01	1.9E+01	4.4E+01	2.7E+01	6.6E+01	6.6E+01
10	BENZENE	0	6	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01
11	BENZO [a] ANTHRACENE	1	6	3.2E+00	1.7E-01	6.7E-01	1.2E+00	1.7E+00	1.7E+00
12	BENZO [a] PYRENE	1	6	2.4E+00	1.7E-01	5.4E-01	9.2E-01	1.3E+00	1.3E+00
13	BENZO [b] FLUORANTHENE	1	6	2.7E+00	1.7E-01	5.8E-01	1.0E+00	1.4E+00	1.4E+00
14	BENZO [g,h,i] PERYLENE	1	6	9.4E-01	1.7E-01	2.9E-01	3.2E-01	5.6E-01	5.6E-01
15	BENZO [k] FLUORANTHENE	1	6	2.0E+00	1.7E-01	4.7E-01	7.5E-01	1.1E+00	1.1E+00
16	BERYLLIUM	2	6	9.5E-01	1.3E-01	3.7E-01	3.9E-01	6.9E-01	6.9E-01
17	BIS (2-ETHYLHEXYL) PHTHALATE	0	6	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01
18	CHROMIUM	6	6	2.2E+01	4.9E+00	1.1E+01	5.8E+00	1.6E+01	1.6E+01
19	CHRYSENE	1	6	3.2E+00	1.7E-01	6.7E-01	1.2E+00	1.7E+00	1.7E+00
20	COBALT	6	6	1.8E+01	3.7E+00	9.5E+00	5.3E+00	1.4E+01	1.4E+01
21	DIBENZOFURAN	1	6	3.6E-01	1.7E-01	2.0E-01	8.0E-02	2.6E-01	2.6E-01
22	DIELDRIN	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
23	ENDOSULFAN SULFATE	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
24	ENDRIN KETONE	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
25	ETHYLBENZENE	0	6	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01
26	FLUORANTHENE	2	6	4.8E+00	1.7E-01	9.8E-01	1.9E+00	2.5E+00	2.5E+00
27	FLUORENE	1	6	7.4E-01	1.7E-01	2.6E-01	2.4E-01	4.5E-01	4.5E-01
28	HEPTACHLOR	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
29	HEPTACHLOR EPOXIDE	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
30	INDENO [1,2,3-c,d] PYRENE	1	6	1.2E+00	1.7E-01	3.3E-01	4.1E-01	6.7E-01	6.7E-01
31	LEAD	2	6	1.6E+01	5.0E+00	8.2E+00	5.0E+00	1.2E+01	1.2E+01
32	METHYLISOBUTYL KETONE	0	6	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01
33	MOLYBDENUM	0	6	2.0E+00	2.0E+00	2.0E+00	0.0E+00	2.0E+00	2.0E+00
34	NAPHTHALENE	0	6	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01
35	NICKEL	0	6	3.8E+00	3.8E+00	3.8E+00	0.0E+00	3.8E+00	3.8E+00
36	PCB 1260	0	6	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01
37	PHENANTHRENE	1	6	3.9E+00	1.7E-01	7.9E-01	1.5E+00	2.1E+00	2.1E+00
38	PYRENE	1	6	4.4E+00	1.7E-01	8.8E-01	1.7E+00	2.3E+00	2.3E+00
39	TOLUENE	0	6	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01
40	VANADIUM	0	6	1.8E+01	6.8E+00	1.0E+01	4.5E+00	1.4E+01	1.4E+01
41	XYLENES, TOTAL COMBINED	0	6	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01

DATA STATISTICS

DATE: 06/09/92
FILE: STAT-7

EXPOSURE POINT: FENCELINE
MEDIUM: SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	6	18	2.3E-01	4.8E-03	4.4E-02	6.3E-02	7.0E-02	7.0E-02
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	1	18	5.5E-02	5.6E-03	1.2E-02	1.6E-02	1.9E-02	1.9E-02
3	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	3	18	1.1E-01	7.1E-03	2.2E-02	3.1E-02	3.5E-02	3.5E-02
4	2,4,5-TRICHLOROPHENOXYACETIC ACID	2	18	1.5E-01	3.0E-03	1.6E-02	3.7E-02	3.2E-02	3.2E-02
5	2,4-DICHLOROPHENOXYACETIC ACID	1	18	6.8E-01	1.4E-02	5.5E-02	1.6E-01	1.2E-01	1.2E-01
6	2-(2,4,5-TRICHLOROPHENOXY) PROPIONIC ACID	1	18	1.7E-01	3.5E-03	1.6E-02	4.1E-02	3.2E-02	3.2E-02
7	ALPHA CHLORDANE	3	18	1.7E-01	2.0E-03	1.3E-02	3.9E-02	2.9E-02	2.9E-02
8	DIELDRIN	0	18	3.9E-02	3.9E-03	7.8E-03	1.1E-02	1.2E-02	1.2E-02
9	ENDOSULFAN SULFATE	0	18	6.5E-02	6.5E-03	1.3E-02	1.9E-02	2.1E-02	2.1E-02
10	ENDRIN KETONE	2	18	3.1E-02	3.1E-03	8.0E-03	1.0E-02	1.2E-02	1.2E-02
11	GAMMA-CHLORDANE	0	18	1.1E-01	1.1E-02	2.1E-02	3.0E-02	3.4E-02	3.4E-02
12	HEPTACHLOR	0	18	4.8E-02	4.8E-03	9.6E-03	1.4E-02	1.5E-02	1.5E-02
13	HEPTACHLOR EPOXIDE	0	18	2.0E-02	2.0E-03	3.9E-03	5.7E-03	6.2E-03	6.2E-03
14	PCB 1260	0	18	5.0E-01	5.0E-02	1.0E-01	1.5E-01	1.6E-01	1.6E-01

DATA STATISTICS

DATE: 06/05/92
FILE: STAT-8

EXPOSURE POINT: BUILDING 30
MEDIUM: SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHAN	2	2	7.4E+00	3.8E+00	5.6E+00	2.5E+00	1.7E+01	7.4E+00	*
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	2	2	1.4E+00	7.9E-01	1.1E+00	4.1E-01	2.9E+00	1.4E+00	*
3	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	2	2	2.4E+00	1.5E+00	1.9E+00	6.3E-01	4.7E+00	2.4E+00	*
4	ALPHA CHLORDANE	1	2	7.9E-02	9.0E-03	4.4E-02	4.9E-02	2.6E-01	7.9E-02	*
5	BETA-ENDOSULFAN / ENDOSULFAN II	0	2	1.4E-01	1.4E-01	1.4E-01	0.0E+00	1.4E-01	1.4E-01	
6	DIELDRIN	0	2	2.6E-02	2.6E-02	2.6E-02	0.0E+00	2.6E-02	2.6E-02	
7	ENDOSULFAN SULFATE	0	2	3.5E-01	3.5E-01	3.5E-01	0.0E+00	3.5E-01	3.5E-01	
8	ENDRIN KETONE	0	2	8.0E-02	8.0E-02	8.0E-02	0.0E+00	8.0E-02	8.0E-02	
9	GAMMA-CHLORDANE	1	2	8.6E-02	1.9E-02	5.3E-02	4.7E-02	2.6E-01	8.6E-02	*
10	HEPTACHLOR	0	2	6.0E-03	6.0E-03	6.0E-03	0.0E+00	6.0E-03	6.0E-03	
11	HEPTACHLOR EPOXIDE	0	2	1.8E-02	1.8E-02	1.8E-02	0.0E+00	1.8E-02	1.8E-02	
12	METHOXYCHLOR	0	2	4.0E-01	2.5E-01	3.3E-01	1.1E-01	8.0E-01	4.0E-01	*
13	PCB 1260	1	1	1.4E-01	1.4E-01	1.4E-01	0.0E+00	1.4E-01	1.4E-01	

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-9

EXPOSURE POINT: HOLMES RUN
MEDIUM: SURFACE WATER
UNITS: MG/L
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	2	4.2E-05	4.2E-05	4.2E-05	0.0E+00	4.2E-05	4.2E-05	
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	2	4.7E-05	4.7E-05	4.7E-05	0.0E+00	4.7E-05	4.7E-05	
3	ACENAPHTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
4	ACETONE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
5	ALPHA CHLORDANE	0	2	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05	
6	ALUMINUM	0	2	5.4E-02	5.4E-02	5.4E-02	0.0E+00	5.4E-02	5.4E-02	
7	ANTHRACENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
8	ARSENIC	0	2	3.0E-03	3.0E-03	3.0E-03	0.0E+00	3.0E-03	3.0E-03	
9	BARIUM	2	2	3.9E-02	3.1E-02	3.5E-02	5.7E-03	6.1E-02	3.9E-02	*
10	BENZO [a] ANTHRACENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
11	BENZO [a] PYRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
12	BENZO [b] FLUORANTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
13	BENZO [k] FLUORANTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
14	BENZOIC ACID	0	2	2.5E-02	2.5E-02	2.5E-02	0.0E+00	2.5E-02	2.5E-02	
15	BERYLLIUM	0	2	1.3E-03	1.3E-03	1.3E-03	0.0E+00	1.3E-03	1.3E-03	
16	BIS (2-ETHYLHEXYL) PHTHALATE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
17	CADMIUM	1	2	5.1E-03	2.5E-03	3.8E-03	1.8E-03	1.2E-02	5.1E-03	*
18	CHLORIDE	2	2	5.8E+01	5.8E+01	5.8E+01	0.0E+00	5.8E+01	5.8E+01	
19	CHROMIUM	0	2	7.5E-03	7.5E-03	7.5E-03	0.0E+00	7.5E-03	7.5E-03	
20	CHRYSENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
21	COBALT	0	2	1.3E-02	1.3E-02	1.3E-02	0.0E+00	1.3E-02	1.3E-02	
22	ENDOSULFAN SULFATE	1	2	5.7E-05	1.0E-05	3.3E-05	3.3E-05	1.8E-04	5.7E-05	*
23	FLUORANTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
24	FLUORENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
25	FLUORIDE	0	2	2.0E-01	2.0E-01	2.0E-01	0.0E+00	2.0E-01	2.0E-01	
26	GAMMA-CHLORDANE	0	2	2.3E-05	2.3E-05	2.3E-05	0.0E+00	2.3E-05	2.3E-05	
27	INDENO [1,2,3-c,d] PYRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
28	LEAD	0	2	6.3E-04	6.3E-04	6.3E-04	0.0E+00	6.3E-04	6.3E-04	
29	MERCURY	0	2	3.7E-04	3.7E-04	3.7E-04	0.0E+00	3.7E-04	3.7E-04	
30	NICKEL	0	2	3.2E-02	3.2E-02	3.2E-02	0.0E+00	3.2E-02	3.2E-02	
31	NITRATE	2	2	2.3E+00	1.2E+00	1.7E+00	7.8E-01	5.2E+00	2.3E+00	*
32	NITRITE	0	2	5.5E-03	5.5E-03	5.5E-03	0.0E+00	5.5E-03	5.5E-03	
33	PCB 1260	0	2	5.0E-05	5.0E-05	5.0E-05	0.0E+00	5.0E-05	5.0E-05	
34	PHENANTHRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
35	PYRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
36	SILVER	0	2	2.5E-04	2.5E-04	2.5E-04	0.0E+00	2.5E-04	2.5E-04	
37	SULFATE	2	2	1.4E+01	1.2E+01	1.3E+01	1.1E+00	1.8E+01	1.4E+01	*

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-10

EXPOSURE POINT: HOLMES RUN
MEDIUM: SEDIMENT
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	2	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	2	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
3	ACENAPHTHENE	0	2	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
4	ACETONE	0	2	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01	
5	ALUMINUM	2	2	1.6E+03	9.1E+02	1.2E+03	4.7E+02	3.4E+03	1.6E+03	*
6	ANTHRACENE	0	2	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
7	ARSENIC	0	2	6.4E+00	6.4E+00	6.4E+00	0.0E+00	6.4E+00	6.4E+00	
8	BARIUM	2	2	1.4E+01	1.4E+01	1.4E+01	0.0E+00	1.4E+01	1.4E+01	
9	BENZO [a] ANTHRACENE	1	2	7.0E-01	1.7E-01	4.3E-01	3.8E-01	2.1E+00	7.0E-01	*
10	BENZO [a] PYRENE	1	2	6.0E-01	1.7E-01	3.8E-01	3.1E-01	1.8E+00	6.0E-01	*
11	BENZO [b] FLUORANTHENE	1	2	5.6E-01	1.7E-01	3.6E-01	2.8E-01	1.6E+00	5.6E-01	*
12	BENZO [k] FLUORANTHENE	1	2	6.0E-01	1.7E-01	3.8E-01	3.1E-01	1.8E+00	6.0E-01	*
13	BENZOIC ACID	0	2	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
14	BERYLLIUM	1	2	8.7E-01	1.3E-01	5.0E-01	5.3E-01	2.9E+00	8.7E-01	*
15	BIS (2-ETHYLHEXYL) PHTHALATE	0	2	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
16	CADMIUM	0	2	2.1E-01	2.1E-01	2.1E-01	0.0E+00	2.1E-01	2.1E-01	
17	CHROMIUM	1	2	5.4E+00	4.9E-01	2.9E+00	3.5E+00	1.8E+01	5.4E+00	*
18	CHRYSENE	1	2	8.5E-01	1.7E-01	5.1E-01	4.9E-01	2.7E+00	8.5E-01	*
19	COBALT	1	2	5.3E+00	1.3E+00	3.3E+00	2.8E+00	1.6E+01	5.3E+00	*
20	ENDOSULFAN SULFATE	0	2	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
21	FLUORANTHENE	1	2	1.6E+00	1.7E-01	9.0E-01	1.0E+00	5.5E+00	1.6E+00	*
22	FLUORENE	0	2	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
23	INDENO [1,2,3-c,d] PYRENE	0	2	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
24	LEAD	0	2	5.0E+00	5.0E+00	5.0E+00	0.0E+00	5.0E+00	5.0E+00	
25	MERCURY	0	2	4.4E-02	4.4E-02	4.4E-02	0.0E+00	4.4E-02	4.4E-02	
26	NICKEL	0	2	3.8E+00	3.8E+00	3.8E+00	0.0E+00	3.8E+00	3.8E+00	
27	PCB 1260	0	2	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
28	PHENANTHRENE	1	2	1.6E+00	1.7E-01	9.0E-01	1.0E+00	5.5E+00	1.6E+00	*
29	PYRENE	1	2	1.5E+00	1.7E-01	8.3E-01	9.4E-01	5.0E+00	1.5E+00	*
30	SILVER	0	2	5.1E-01	5.1E-01	5.1E-01	0.0E+00	5.1E-01	5.1E-01	

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-11

EXPOSURE POINT: BACKLICK RUN
MEDIUM: SURFACE WATER
UNITS: MG/L
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	2	4.2E-05	4.2E-05	4.2E-05	0.0E+00	4.2E-05	4.2E-05	
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	2	4.7E-05	4.7E-05	4.7E-05	0.0E+00	4.7E-05	4.7E-05	
3	ACENAPHTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
4	ACETONE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
5	ALPHA CHLORDANE	0	2	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05	
6	ALUMINUM	1	2	3.0E-01	5.4E-02	1.7E-01	1.7E-01	9.4E-01	3.0E-01	*
7	ANTHRACENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
8	ARSENIC	0	2	3.0E-03	3.0E-03	3.0E-03	0.0E+00	3.0E-03	3.0E-03	
9	BARIUM	2	2	6.2E-02	6.0E-02	6.1E-02	1.8E-03	6.9E-02	6.2E-02	*
10	BENZO [a] ANTHRACENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
11	BENZO [a] PYRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
12	BENZO [b] FLUORANTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
13	BENZO [k] FLUORANTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
14	BENZOIC ACID	0	2	2.5E-02	2.5E-02	2.5E-02	0.0E+00	2.5E-02	2.5E-02	
15	BERYLLIUM	0	2	1.3E-03	1.3E-03	1.3E-03	0.0E+00	1.3E-03	1.3E-03	
16	BIS (2-ETHYLHEXYL) PHTHALATE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
17	CADMIUM	0	2	2.5E-03	2.5E-03	2.5E-03	0.0E+00	2.5E-03	2.5E-03	
18	CHLORIDE	2	2	4.5E+01	4.4E+01	4.4E+01	3.5E-01	4.6E+01	4.5E+01	*
19	CHROMIUM	0	2	7.5E-03	7.5E-03	7.5E-03	0.0E+00	7.5E-03	7.5E-03	
20	CHRYSENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
21	COBALT	0	2	1.3E-02	1.3E-02	1.3E-02	0.0E+00	1.3E-02	1.3E-02	
22	ENDOSULFAN SULFATE	0	2	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05	
23	FLUORANTHENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
24	FLUORENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
25	FLUORIDE	0	2	2.0E-01	2.0E-01	2.0E-01	0.0E+00	2.0E-01	2.0E-01	
26	GAMMA-CHLORDANE	0	2	2.3E-05	2.3E-05	2.3E-05	0.0E+00	2.3E-05	2.3E-05	
27	INDENO [1,2,3-c,d] PYRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
28	LEAD	0	2	6.3E-04	6.3E-04	6.3E-04	0.0E+00	6.3E-04	6.3E-04	
29	MERCURY	0	2	3.7E-04	3.7E-04	3.7E-04	0.0E+00	3.7E-04	3.7E-04	
30	NICKEL	0	2	3.2E-02	3.2E-02	3.2E-02	0.0E+00	3.2E-02	3.2E-02	
31	NITRATE	2	2	1.1E+00	9.9E-01	1.0E+00	6.8E-02	1.3E+00	1.1E+00	*
32	NITRITE	0	2	5.5E-03	5.5E-03	5.5E-03	0.0E+00	5.5E-03	5.5E-03	
33	PCB 1260	0	2	5.0E-05	5.0E-05	5.0E-05	0.0E+00	5.0E-05	5.0E-05	
34	PHENANTHRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
35	PYRENE	0	2	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
36	SILVER	1	2	4.7E-04	2.5E-04	3.6E-04	1.6E-04	1.1E-03	4.7E-04	*
37	SULFATE	2	2	1.4E+01	1.4E+01	1.4E+01	1.8E-01	1.5E+01	1.4E+01	*

DATA STATISTICS

DATE: 06/09/92
FILE: STAT-12

EXPOSURE POINT: BACKLICK RUN
MEDIUM: SEDIMENT
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	1	8.5E-01	8.5E-01	8.5E-01	0.0E+00	ERR	8.5E-01 *
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	1	8.5E-01	8.5E-01	8.5E-01	0.0E+00	ERR	8.5E-01 *
3	ACENAPHTHENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
4	ACETONE	0	1	6.0E-01	6.0E-01	6.0E-01	0.0E+00	ERR	6.0E-01 *
5	ALUMINUM	1	1	8.5E+02	8.5E+02	8.5E+02	0.0E+00	ERR	8.5E+02 *
6	ANTHRACENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
7	ARSENIC	0	1	6.4E+00	6.4E+00	6.4E+00	0.0E+00	ERR	6.4E+00 *
8	BARIUM	1	1	1.3E+01	1.3E+01	1.3E+01	0.0E+00	ERR	1.3E+01 *
9	BENZO (a) ANTHRACENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
10	BENZO (a) PYRENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
11	BENZO (b) FLUORANTHENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
12	BENZO (k) FLUORANTHENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
13	BENZOIC ACID	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
14	BERYLLIUM	0	1	1.3E-01	1.3E-01	1.3E-01	0.0E+00	ERR	1.3E-01 *
15	BIS (2-ETHYLHEXYL) PHTHALATE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
16	CADMIUM	0	1	2.1E-01	2.1E-01	2.1E-01	0.0E+00	ERR	2.1E-01 *
17	CHROMIUM	1	1	3.4E+00	3.4E+00	3.4E+00	0.0E+00	ERR	3.4E+00 *
18	CHRYSENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
19	COBALT	1	1	2.8E+00	2.8E+00	2.8E+00	0.0E+00	ERR	2.8E+00 *
20	ENDOSULFAN SULFATE	0	1	8.5E-01	8.5E-01	8.5E-01	0.0E+00	ERR	8.5E-01 *
21	FLUORANTHENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
22	FLUORENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
23	INDENO (1,2,3-c,d) PYRENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
24	LEAD	0	1	5.0E+00	5.0E+00	5.0E+00	0.0E+00	ERR	5.0E+00 *
25	MERCURY	0	1	4.4E-02	4.4E-02	4.4E-02	0.0E+00	ERR	4.4E-02 *
26	NICKEL	0	1	3.8E+00	3.8E+00	3.8E+00	0.0E+00	ERR	3.8E+00 *
27	PCB 1260	0	1	8.5E-01	8.5E-01	8.5E-01	0.0E+00	ERR	8.5E-01 *
28	PHENANTHRENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
29	PYRENE	0	1	1.7E-01	1.7E-01	1.7E-01	0.0E+00	ERR	1.7E-01 *
30	SILVER	0	1	5.1E-01	5.1E-01	5.1E-01	0.0E+00	ERR	5.1E-01 *

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-13

EXPOSURE POINT: CAMERON RUN
MEDIUM: SURFACE WATER
UNITS: MG/L
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	3	4.2E-05	4.2E-05	4.2E-05	0.0E+00	4.2E-05	4.2E-05	
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	3	4.7E-05	4.7E-05	4.7E-05	0.0E+00	4.7E-05	4.7E-05	
3	ACENAPHTHENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
4	ACETONE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
5	ALPHA CHLORDANE	0	3	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05	
6	ALUMINUM	0	3	5.4E-02	5.4E-02	5.4E-02	0.0E+00	5.4E-02	5.4E-02	
7	ANTHRACENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
8	ARSENIC	0	3	3.0E-03	3.0E-03	3.0E-03	0.0E+00	3.0E-03	3.0E-03	
9	BARIUM	3	3	5.4E-02	3.4E-02	4.1E-02	1.1E-02	6.0E-02	5.4E-02	*
10	BENZO [a] ANTHRACENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
11	BENZO [a] PYRENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
12	BENZO [b] FLUORANTHENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
13	BENZO [k] FLUORANTHENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
14	BENZOIC ACID	0	3	2.5E-02	5.0E-03	1.8E-02	1.2E-02	3.8E-02	2.5E-02	*
15	BERYLLIUM	0	3	1.3E-03	1.3E-03	1.3E-03	0.0E+00	1.3E-03	1.3E-03	
16	BIS (2-ETHYLHEXYL) PHTHALATE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
17	CADMIUM	0	3	2.5E-03	2.5E-03	2.5E-03	0.0E+00	2.5E-03	2.5E-03	
18	CHLORIDE	3	3	5.9E+01	4.6E+01	5.2E+01	6.5E+00	6.3E+01	5.9E+01	*
19	CHROMIUM	0	3	7.5E-03	7.5E-03	7.5E-03	0.0E+00	7.5E-03	7.5E-03	
20	CHRYSENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
21	COBALT	0	3	1.3E-02	1.3E-02	1.3E-02	0.0E+00	1.3E-02	1.3E-02	
22	ENDOSULFAN SULFATE	0	3	1.0E-05	1.0E-05	1.0E-05	0.0E+00	1.0E-05	1.0E-05	
23	FLUORANTHENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
24	FLUORENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
25	FLUORIDE	0	3	2.0E-01	2.0E-01	2.0E-01	0.0E+00	2.0E-01	2.0E-01	
26	GAMMA-CHLORDANE	0	3	2.3E-05	2.3E-05	2.3E-05	0.0E+00	2.3E-05	2.3E-05	
27	INDENO [1,2,3-c,d] PYRENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
28	LEAD	0	3	6.3E-04	6.3E-04	6.3E-04	0.0E+00	6.3E-04	6.3E-04	
29	MERCURY	0	3	3.7E-04	3.7E-04	3.7E-04	0.0E+00	3.7E-04	3.7E-04	
30	NICKEL	0	3	3.2E-02	3.2E-02	3.2E-02	0.0E+00	3.2E-02	3.2E-02	
31	NITRATE	3	3	1.0E+00	8.9E-01	9.4E-01	5.8E-02	1.0E+00	1.0E+00	*
32	NITRITE	1	3	1.4E-01	5.5E-03	5.1E-02	7.8E-02	1.8E-01	1.4E-01	*
33	PCB 1260	0	3	1.0E-04	5.0E-05	6.7E-05	2.9E-05	1.2E-04	1.0E-04	*
34	PHENANTHRENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
35	PYRENE	0	3	5.0E-03	5.0E-03	5.0E-03	0.0E+00	5.0E-03	5.0E-03	
36	SILVER	1	3	6.9E-04	2.5E-04	4.0E-04	2.5E-04	8.2E-04	6.9E-04	*
37	SULFATE	3	3	1.4E+01	1.2E+01	1.3E+01	1.0E+00	1.5E+01	1.4E+01	*

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-14

EXPOSURE POINT: CAMERON RUN
MEDIUM: SEDIMENT
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	0	3	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	0	3	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
3	ACENAPHTHENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
4	ACETONE	1	3	1.9E+00	6.0E-01	1.0E+00	7.7E-01	2.4E+00	1.9E+00	*
5	ALUMINUM	3	3	1.2E+03	3.0E+02	6.5E+02	4.5E+02	1.4E+03	1.2E+03	*
6	ANTHRACENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
7	ARSENIC	0	3	6.4E+00	6.4E+00	6.4E+00	0.0E+00	6.4E+00	6.4E+00	
8	BARIUM	1	3	8.5E+00	2.4E+00	4.4E+00	3.5E+00	1.0E+01	8.5E+00	*
9	BENZO [a] ANTHRACENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
10	BENZO [a] PYRENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
11	BENZO [b] FLUORANTHENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
12	BENZO [k] FLUORANTHENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
13	BENZOIC ACID	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
14	BERYLLIUM	0	3	1.3E-01	1.3E-01	1.3E-01	0.0E+00	1.3E-01	1.3E-01	
15	BIS (2-ETHYLHEXYL) PHTHALATE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
16	CADMIUM	0	3	2.1E-01	2.1E-01	2.1E-01	0.0E+00	2.1E-01	2.1E-01	
17	CHROMIUM	2	3	5.4E+00	4.9E-01	2.6E+00	2.5E+00	6.8E+00	5.4E+00	*
18	CHRYSENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
19	COBALT	0	3	1.3E+00	1.3E+00	1.3E+00	0.0E+00	1.3E+00	1.3E+00	
20	ENDOSULFAN SULFATE	0	3	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
21	FLUORANTHENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
22	FLUORENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
23	INDENO [1,2,3-c,d] PYRENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
24	LEAD	0	3	5.0E+00	5.0E+00	5.0E+00	0.0E+00	5.0E+00	5.0E+00	
25	MERCURY	0	3	4.4E-02	4.4E-02	4.4E-02	0.0E+00	4.4E-02	4.4E-02	
26	NICKEL	0	3	3.8E+00	3.8E+00	3.8E+00	0.0E+00	3.8E+00	3.8E+00	
27	PCB 1260	0	3	8.5E-01	8.5E-01	8.5E-01	0.0E+00	8.5E-01	8.5E-01	
28	PHENANTHRENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
29	PYRENE	0	3	1.7E-01	1.7E-01	1.7E-01	0.0E+00	1.7E-01	1.7E-01	
30	SILVER	0	3	5.1E-01	5.1E-01	5.1E-01	0.0E+00	5.1E-01	5.1E-01	

DATA STATISTICS

DATE: 06/09/92
FILE: STAT-15

EXPOSURE POINT: FUTURE YARD
MEDIUM: SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHAN	13	44	1.2E+00	4.8E-03	2.3E-01	3.7E-01	3.2E-01	3.2E-01
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	4	44	8.5E-01	5.0E-03	1.8E-01	3.4E-01	2.7E-01	2.7E-01
3	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	10	44	8.5E-01	2.0E-03	1.9E-01	3.4E-01	2.8E-01	2.8E-01
4	2,4,5-TRICHLOROPHENOXYACETIC ACID	0	6	3.0E-03	3.0E-03	3.0E-03	0.0E+00	3.0E-03	3.0E-03
5	2,4-DICHLOROPHENOXYACETIC ACID	0	6	1.4E-02	1.4E-02	1.4E-02	0.0E+00	1.4E-02	1.4E-02
6	2-(2,4,5-TRICHLOROPHENOXY) PROPIONIC ACID	0	6	3.5E-03	3.5E-03	3.5E-03	0.0E+00	3.5E-03	3.5E-03
7	2-METHYLNAPHTHALENE	0	21	2.1E-01	1.7E-01	1.7E-01	9.8E-03	1.7E-01	1.7E-01
8	ACENAPHTHENE	0	21	3.8E-01	1.7E-01	1.9E-01	5.4E-02	2.1E-01	2.1E-01
9	ACETONE	0	21	6.0E-01	5.0E-03	4.3E-01	2.8E-01	5.3E-01	5.3E-01
10	ALPHA CHLORDANE	9	35	2.6E+00	9.2E-04	8.0E-02	4.4E-01	2.1E-01	2.1E-01
11	ALUMINUM	17	17	1.2E+04	1.6E+02	3.5E+03	2.9E+03	4.7E+03	4.7E+03
12	ANTHRACENE	0	21	5.6E-01	1.7E-01	2.2E-01	1.0E-01	2.5E-01	2.5E-01
13	BARIUM	15	17	1.4E+02	2.4E+00	3.2E+01	3.3E+01	4.6E+01	4.6E+01
14	BENZENE	0	21	6.0E-01	1.5E-03	4.3E-01	2.8E-01	5.3E-01	5.3E-01
15	BENZO [a] ANTHRACENE	0	21	2.7E-01	1.5E-01	1.7E-01	2.7E-02	1.8E-01	1.8E-01
16	BENZO [a] PYRENE	0	21	4.0E-01	1.7E-01	1.9E-01	5.7E-02	2.1E-01	2.1E-01
17	BENZO [b] FLUORANTHENE	0	21	3.2E-01	1.7E-01	1.8E-01	3.7E-02	1.9E-01	1.9E-01
18	BENZO [g,h,i] PERYLENE	0	21	1.9E-01	1.2E-01	1.6E-01	1.9E-02	1.6E-01	1.6E-01
19	BENZO [k] FLUORANTHENE	0	21	1.1E+00	1.7E-01	2.8E-01	2.4E-01	3.7E-01	3.7E-01
20	BERYLLIUM	13	17	1.4E+00	1.3E-01	5.4E-01	3.4E-01	6.9E-01	6.9E-01
21	BETA-ENDOSULFAN / ENDOSULFAN II	1	13	2.4E-01	9.0E-03	3.7E-02	6.1E-02	6.7E-02	6.7E-02
22	BIS (2-ETHYLHEXYL) PHTHALATE	2	21	8.8E-01	1.7E-01	2.3E-01	1.7E-01	3.0E-01	3.0E-01
23	CHROMIUM	13	17	4.0E+01	4.9E-01	8.5E+00	9.3E+00	1.2E+01	1.2E+01
24	CHRYSENE	0	21	4.4E-01	1.7E-01	2.0E-01	6.9E-02	2.2E-01	2.2E-01
25	COBALT	10	17	3.2E+01	7.1E-01	6.5E+00	7.9E+00	9.8E+00	9.8E+00
26	DIBENZOFURAN	0	21	2.1E-01	1.7E-01	1.7E-01	9.8E-03	1.7E-01	1.7E-01
27	DIELDRIN	1	44	8.5E-01	2.5E-03	1.8E-01	3.4E-01	2.7E-01	2.7E-01
28	ENDOSULFAN SULFATE	1	44	8.5E-01	6.5E-03	2.5E-01	3.2E-01	3.3E-01	3.3E-01
29	ENDRIN KETONE	0	44	8.5E-01	3.1E-03	1.9E-01	3.4E-01	2.7E-01	2.7E-01
30	ETHYLBENZENE	0	21	6.0E-01	1.7E-03	4.3E-01	2.8E-01	5.3E-01	5.3E-01
31	FLUORANTHENE	1	21	5.8E-01	1.7E-01	2.3E-01	1.2E-01	2.8E-01	2.8E-01
32	FLUORENE	0	21	2.1E-01	1.7E-01	1.7E-01	9.8E-03	1.7E-01	1.7E-01
33	GAMMA-CHLORDANE	5	35	2.0E+00	1.9E-03	6.6E-02	3.4E-01	1.6E-01	1.6E-01
34	HEPTACHLOR	1	44	8.5E-01	5.0E-04	1.8E-01	3.5E-01	2.6E-01	2.6E-01
35	HEPTACHLOR EPOXIDE	0	43	8.5E-01	1.8E-03	1.8E-01	3.5E-01	2.7E-01	2.7E-01
36	INDENO [1,2,3-c,d] PYRENE	0	21	1.7E-01	1.1E-01	1.5E-01	2.6E-02	1.6E-01	1.6E-01
37	LEAD	4	17	3.2E+01	4.8E+00	6.7E+00	6.6E+00	9.5E+00	9.5E+00
38	METHOXYCHLOR	0	13	4.0E-01	1.3E-02	6.1E-02	1.0E-01	1.1E-01	1.1E-01
39	METHYLISOBUTYL KETONE	0	21	6.0E-01	5.0E-03	4.3E-01	2.8E-01	5.3E-01	5.3E-01
40	MOLYBDENUM	1	14	5.4E+00	2.0E+00	2.2E+00	9.2E-01	2.7E+00	2.7E+00
41	NAPHTHALENE	0	21	4.2E-01	1.7E-01	1.9E-01	6.4E-02	2.2E-01	2.2E-01
42	NICKEL	2	17	3.3E+01	1.2E+00	6.0E+00	8.1E+00	9.4E+00	9.4E+00
43	PCB 1260	2	40	8.5E-01	2.7E-02	2.4E-01	3.4E-01	3.3E-01	3.3E-01

DATA STATISTICS

DATE: 06/09/92
FILE: STAT-15

EXPOSURE POINT: FUTURE YARD
MEDIUM: SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
44 PHENANTHRENE	0	21	4.0E-01	1.7E-01	1.9E-01	5.7E-02	2.1E-01	2.1E-01
45 PYRENE	1	21	6.4E-01	1.7E-01	2.2E-01	1.2E-01	2.6E-01	2.6E-01
46 TOLUENE	0	21	6.0E-01	4.2E-03	4.3E-01	2.8E-01	5.3E-01	5.3E-01
47 VANADIUM	3	17	3.6E+01	1.0E+00	1.0E+01	9.1E+00	1.4E+01	1.4E+01
48 XYLENES, TOTAL COMBINED	0	15	6.0E-01	6.0E-01	6.0E-01	0.0E+00	6.0E-01	6.0E-01

DATA STATISTICS

DATE: 03/31/92
FILE: STAT-16

EXPOSURE POINT: TRANSFORMER POLES
MEDIUM: SOIL
UNITS: MG/KG
U MULTIPLIER: 0.5

	CHEMICAL	HITS	TOTAL	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION
1	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE	6	6	4.9E+00	3.6E-02	1.0E+00	1.9E+00	2.6E+00	2.6E+00
2	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE	4	6	1.2E-01	5.0E-03	5.6E-02	5.4E-02	1.0E-01	1.0E-01
3	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE	6	6	1.5E+00	6.0E-03	3.4E-01	5.8E-01	8.2E-01	8.2E-01
4	ALPHA CHLORDANE	5	5	1.0E-01	8.0E-03	4.3E-02	4.3E-02	8.4E-02	8.4E-02
5	BETA-ENDOSULFAN / ENDOSULFAN II	0	6	1.9E-02	9.0E-03	1.3E-02	3.7E-03	1.6E-02	1.6E-02
6	DIELDRIN	0	6	3.0E-03	2.5E-03	2.6E-03	2.0E-04	2.8E-03	2.8E-03
7	ENDOSULFAN SULFATE	0	6	1.4E-01	2.2E-02	4.8E-02	4.5E-02	8.5E-02	8.5E-02
8	ENDRIN KETONE	0	6	1.2E-02	5.0E-03	7.6E-03	2.4E-03	9.6E-03	9.6E-03
9	GAMMA-CHLORDANE	5	6	8.8E-02	2.0E-03	4.1E-02	3.4E-02	6.9E-02	6.9E-02
10	HEPTACHLOR	2	6	6.0E-03	5.0E-04	1.7E-03	2.2E-03	3.5E-03	3.5E-03
11	HEPTACHLOR EPOXIDE	1	4	6.0E-03	2.0E-03	3.0E-03	2.0E-03	5.4E-03	5.4E-03
12	METHOXYCHLOR	4	6	1.3E+00	1.3E-02	4.6E-01	5.4E-01	9.0E-01	9.0E-01
13	PCB 1260	1	1	2.7E-01	2.7E-01	2.7E-01	0.0E+00	ERR	2.7E-01 *

DATA STATISTICS

DATE: 04/14/92
FILE: DIOXSTAT.WQ1

CHEMICAL: DIOXIN EQUIVALENTS
MEDIUM: SOIL/SEDIMENT
UNITS: MG/KG

SOURCE AREA	SAMPLES	MAX	MIN	MEAN	STDS	95th	EXPOSURE POINT CONCENTRATION	
BACKLICK RUN	3	1.3E-06	2.4E-07	7.0E-07	5.7E-07	1.7E-06	1.3E-06	*
CAMERON LAKE	2	1.7E-06	4.4E-07	1.1E-06	9.1E-07	5.1E-06	1.7E-06	*
FISH	2	3.0E-06	1.3E-06	2.2E-06	1.2E-06	7.6E-06	3.0E-06	*
HOLMES RUN	3	6.4E-07	2.9E-07	4.6E-07	1.7E-07	7.5E-07	6.4E-07	*
FENCELINE	21	4.7E-04	2.4E-06	7.7E-05	1.3E-04	1.3E-04	1.3E-04	
RAIL LINES	8	9.1E-05	1.7E-06	2.7E-05	3.0E-05	4.7E-05	4.7E-05	

Summary of PM10 Air Concentrations at Exposure Points[a]

Exposure Point	Exposure Scenario	Ann. Ave. PM10, kg/m3
Cameron Lake	Current Future	4.7E-09 4.7E-09
Gas Station (Bldg. 23)	Current	4.1E-09
Picnic Ground	Current Future	1.3E-08 1.3E-08
Ballfield	Current Future	3.7E-08 3.7E-08
Jogging Trail from Service Road	Current Future	5.2E-07 5.2E-07
Jogging Trail from Landfill	Current Future	3.8E-08 3.8E-08
Bldg. 30 Soil Area	Current Future	2.2E-08 NA[b]
Construction Site	Current Future	NA 2.4E-08

(a) The estimated PM10 air concentration is multiplied by the mass fraction of the chemical of potential concern to obtain the air concentration of the chemical.
(b) NA = Not applicable.

Box Model Estimations of VOC Air Concentrations Emitted From Subsurface Soils

Chemical	Estimated Air Concentrations, kg/m3			
		Cameron Lake		
	Gas Station	Current	Future	Future Residence
Acetone	6.1E-15	5.9E-15	6.0E-14	5.9E-14
Benzene	4.3E-17	4.1E-17	4.2E-16	4.1E-16
Ethylbenzene	1.9E-18	1.9E-18	1.9E-17	1.9E-17
Methylisobutyl Ketone	7.9E-19	7.6E-19	7.7E-18	7.6E-18
Naphthalene	7.3E-20	7.0E-20	7.1E-19	7.0E-19
Toluene	7.9E-18	7.6E-18	7.7E-17	7.6E-17
Xylenes, Total	2.8E-17	2.7E-17	2.8E-16	2.7E-16

Box Model Estimation of VOC Air Concentrations Emitted from Groundwater

Chemical	Estimated Air Concentrations, mg/m3	
	South Plume	North Plume
Benzene	1.2E-10	ND
TCE	ND	1.3E-10

APPENDIX C

CARCINOGENIC AND NON-CARCINOGENIC RISKS AT CAMERON STATION

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP1
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
CONST-WORKER

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 ON-SITE SOIL ORAL (FROM WS1)	SCENARIO 2 ON-SITE SOIL DERMAL (FROM WS2)	SCENARIO 3 ON-SITE AIR-PART INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	2.2E-04	NA	3.4E-07			
3	BERYLLIUM	3.2E-06	NA	5.1E-09			
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00			
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00			
6	CHROMIUM	5.8E-05	NA	9.2E-08			
7	MERCURY	0.0E+00	NA	0.0E+00			
8	NICKEL	4.4E-05	NA	7.0E-08			
9	NITRATE	0.0E+00	NA	0.0E+00			
10	NITRITE	0.0E+00	NA	0.0E+00			
11	SILVER	0.0E+00	NA	0.0E+00			
12	THALLIUM	0.0E+00	NA	0.0E+00			
13	VANADIUM	6.6E-05	NA	1.0E-07			
14	ACETONE	2.5E-06	NA	4.0E-09			
15	BENZENE	2.5E-06	NA	4.0E-09			
16	CARBON DISULFI	0.0E+00	NA	0.0E+00			
17	ETHYLBENZENE	2.5E-06	NA	4.0E-09			
18	METHYLISOBUTYL	2.5E-06	NA	4.0E-09			
19	TOLUENE	2.5E-06	NA	4.0E-09			
20	XYLENES, TOTAL	2.8E-06	NA	4.5E-09			
21	1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00			
22	1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00			
23	2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00			
24	2-METHYLNAPHTH	0.0E+00	NA	1.3E-09			
25	2-METHYLPHENOL	0.0E+00	NA	0.0E+00			
26	ACENAPHTHENE	0.0E+00	NA	1.6E-09			
27	ANTHRACENE	0.0E+00	NA	1.9E-09			
28	BENZO [a] ANTH	0.0E+00	NA	1.3E-09			
29	BENZO [a] PYRE	0.0E+00	NA	1.5E-09			
30	BENZO [b] FLUO	0.0E+00	NA	1.4E-09			
31	BENZO [g,h,i]	0.0E+00	NA	1.2E-09			
32	BENZO [k] FLUO	0.0E+00	NA	2.8E-09			
33	BIS (2-ETHYLHE	1.4E-06	NA	2.2E-09			
34	CHRYSENE	0.0E+00	NA	1.7E-09			
35	DIBENZ [a,h] A	0.0E+00	NA	0.0E+00			
36	FLUORANTHENE	0.0E+00	NA	2.1E-09			
37	FLUORENE	0.0E+00	NA	1.3E-09			
38	INDENO [1,2,3-	0.0E+00	NA	1.2E-09			
39	NAPHTHALENE	0.0E+00	NA	1.6E-09			
40	PHENANTHRENE	0.0E+00	NA	1.6E-09			
41	PHENOL	0.0E+00	NA	0.0E+00			
42	PYRENE	0.0E+00	NA	1.9E-09			

SUBCHRONIC RISK SUMMARY

FUTURE
CONST-WORKER

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 ON-SITE SOIL ORAL (FROM WS1)	SCENARIO 2 ON-SITE SOIL DERMAL (FROM WS2)	SCENARIO 3 ON-SITE AIR-PART INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	NA	0E+00	0E+00	0E+00
3E-03	NA	3E-04			
6E-04	NA	NA			
NA	NA	NA			
NA	NA	NA			
3E-03	NA	2E-02			
0E+00	NA	0E+00			
2E-03	NA	NA			
NA	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
9E-03	NA	NA			
3E-06	NA	NA			
NA	NA	NA			
0E+00	NA	0E+00			
3E-06	NA	1E-08			
5E-06	NA	2E-08			
1E-06	NA	7E-09			
7E-07	NA	5E-08			
0E+00	NA	0E+00			
0E+00	NA	0E+00			
0E+00	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
7E-05	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			

43	2,2-BIS (PARA-	1.5E-06	NA	2.4E-09	3E-03	NA	NA			
44	2,2-BIS (PARA-	1.3E-06	NA	2.0E-09	NA	NA	NA			
45	2,2-BIS (PARA-	1.3E-06	NA	2.1E-09	NA	NA	NA			
46	ALDRIN	0.0E+00	NA	0.0E+00	0E+00	NA	NA			
47	ALPHA CHLORDAN	9.8E-07	NA	1.5E-09	2E-02	NA	NA			
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00	0E+00	NA	NA			
49	BENZOIC ACID	0.0E+00	NA	0.0E+00	0E+00	NA	NA			
50	BETA-ENDOSULFA	3.1E-07	NA	5.0E-10	2E-03	NA	NA			
51	DIELDRIN	1.2E-06	NA	2.0E-09	2E-02	NA	NA			
52	GAMMA-CHLORDAN	7.7E-07	NA	1.2E-09	1E-02	NA	NA			
53	HEPTACHLOR	1.2E-06	NA	2.0E-09	2E-03	NA	NA			
54	HEPTACHLOR EPO	0.0E+00	NA	2.0E-09	NA	NA	NA			
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00	0E+00	NA	NA			
56	METHOXYCHLOR	5.3E-07	NA	8.3E-10	1E-04	NA	NA			
57	PCB 1260	1.5E-06	9.6E-07	2.4E-09	NA	NA	NA			
58	2,4,5-TRICHLOR	1.4E-08	NA	2.2E-11	1E-07	NA	NA			
59	2,4-DICHLOROPH	6.4E-08	NA	1.0E-10	6E-06	NA	NA			
60	2-(2,4,5-TRICH	1.6E-08	NA	2.6E-11	2E-06	NA	NA			
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00			
	PATHWAY SUM (HI)				7E-02	0E+00	2E-02	0E+00	0E+00	0E+00
	POPULATION TOTAL				9E-02					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP1
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

FUTURE
CONST-WORKER

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 ON-SITE SOIL ORAL (FROM WS1)	SCENARIO 2 ON-SITE SOIL DERMAL (FROM WS2)	SCENARIO 3 ON-SITE AIR-PART INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	2.2E-04	NA	3.4E-07			
3	BERYLLIUM	3.2E-06	NA	5.1E-09			
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00			
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00			
6	CHROMIUM	5.8E-05	NA	9.2E-08			
7	MERCURY	0.0E+00	NA	0.0E+00			
8	NICKEL	4.4E-05	NA	7.0E-08			
9	NITRATE	0.0E+00	NA	0.0E+00			
10	NITRITE	0.0E+00	NA	0.0E+00			
11	SILVER	0.0E+00	NA	0.0E+00			
12	THALLIUM	0.0E+00	NA	0.0E+00			
13	VANADIUM	6.6E-05	NA	1.0E-07			
14	ACETONE	2.5E-06	NA	4.0E-09			
15	BENZENE	2.5E-06	NA	4.0E-09			
16	CARBON DISULFI	0.0E+00	NA	0.0E+00			
17	ETHYLBENZENE	2.5E-06	NA	4.0E-09			
18	METHYLISOBUTYL	2.5E-06	NA	4.0E-09			
19	TOLUENE	2.5E-06	NA	4.0E-09			
20	XYLENES, TOTAL	2.8E-06	NA	4.5E-09			
21	1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00			
22	1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00			
23	2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00			
24	2-METHYLNAPHTH	0.0E+00	NA	1.3E-09			
25	2-METHYLPHENOL	0.0E+00	NA	0.0E+00			
26	ACENAPHTHENE	0.0E+00	NA	1.6E-09			
27	ANTHRACENE	0.0E+00	NA	1.9E-09			
28	BENZO [a] ANTH	0.0E+00	NA	1.3E-09			
29	BENZO [a] PYRE	0.0E+00	NA	1.5E-09			
30	BENZO [b] FLUO	0.0E+00	NA	1.4E-09			
31	BENZO [g,h,i]	0.0E+00	NA	1.2E-09			
32	BENZO [k] FLUO	0.0E+00	NA	2.8E-09			
33	BIS (2-ETHYLHE	1.4E-06	NA	2.2E-09			
34	CHRYSENE	0.0E+00	NA	1.7E-09			
35	DIBENZ [a,h] A	0.0E+00	NA	0.0E+00			
36	FLUORANTHENE	0.0E+00	NA	2.1E-09			
37	FLUORENE	0.0E+00	NA	1.3E-09			
38	INDENO [1,2,3-	0.0E+00	NA	1.2E-09			
39	NAPHTHALENE	0.0E+00	NA	1.6E-09			
40	PHENANTHRENE	0.0E+00	NA	1.6E-09			
41	PHENOL	0.0E+00	NA	0.0E+00			
42	PYRENE	0.0E+00	NA	1.9E-09			

CHRONIC RISK SUMMARY

FUTURE
CONST-WORKER

CHRONIC HAZARD QUOTIENT

SCENARIO 1 ON-SITE SOIL ORAL (FROM WS1)	SCENARIO 2 ON-SITE SOIL DERMAL (FROM WS2)	SCENARIO 3 ON-SITE AIR-PART INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	NA	0E+00	0E+00	0E+00
3E-03	NA	3E-03			
6E-04	NA	NA			
0E+00	0E+00	NA			
0E+00	0E+00	NA			
1E-02	NA	2E-01			
0E+00	NA	0E+00			
2E-03	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
9E-03	NA	NA			
3E-05	NA	NA			
NA	NA	NA			
0E+00	NA	0E+00			
3E-05	NA	1E-08			
5E-05	NA	2E-07			
1E-05	NA	7E-09			
1E-06	NA	5E-08			
0E+00	NA	0E+00			
0E+00	NA	0E+00			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
7E-05	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			

43	2,2-BIS (PARA-	1.5E-06	NA	2.4E-09		3E-03	NA	NA			
44	2,2-BIS (PARA-	1.3E-06	NA	2.0E-09		NA	NA	NA			
45	2,2-BIS (PARA-	1.3E-06	NA	2.1E-09		NA	NA	NA			
46	ALDRIN	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
47	ALPHA CHLORDAN	9.8E-07	NA	1.5E-09		2E-02	NA	NA			
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
49	BENZOIC ACID	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
50	BETA-ENDOSULFA	3.1E-07	NA	5.0E-10		6E-03	NA	NA			
51	DIELDRIN	1.2E-06	NA	2.0E-09		2E-02	NA	NA			
52	GAMMA-CHLORDAN	7.7E-07	NA	1.2E-09		1E-02	NA	NA			
53	HEPTACHLOR	1.2E-06	NA	2.0E-09		2E-03	NA	NA			
54	HEPTACHLOR EPO	0.0E+00	NA	2.0E-09		0E+00	NA	NA			
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
56	METHOXYCHLOR	5.3E-07	NA	8.3E-10		1E-04	NA	NA			
57	PCB 1260	1.5E-06	9.6E-07	2.4E-09		NA	NA	NA			
58	2,4,5-TRICHLOR	1.4E-08	NA	2.2E-11		1E-06	NA	NA			
59	2,4-DICHLOROPH	6.4E-08	NA	1.0E-10		6E-06	NA	NA			
60	2-(2,4,5-TRICH	1.6E-08	NA	2.6E-11		2E-06	NA	NA			
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00		0E+00	NA	0E+00			
					PATHWAY SUM (HI)	9E-02	0E+00	2E-01	0E+00	0E+00	0E+00
					POPULATION TOTAL	3E-01					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP1
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

FUTURE
CONST-WORKER

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 ON-SITE SOIL ORAL (FROM WS1)	SCENARIO 2 ON-SITE SOIL DERMAL (FROM WS2)	SCENARIO 3 ON-SITE AIR-PART INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	3.1E-06	NA	4.9E-09			
3	BERYLLIUM	4.6E-08	NA	7.3E-11			
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00			
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00			
6	CHROMIUM	8.3E-07	NA	1.3E-09			
7	MERCURY	0.0E+00	NA	0.0E+00			
8	NICKEL	6.3E-07	NA	1.00E-09			
9	NITRATE	0.0E+00	NA	0.0E+00			
10	NITRITE	0.0E+00	NA	0.0E+00			
11	SILVER	0.0E+00	NA	0.0E+00			
12	THALLIUM	0.0E+00	NA	0.0E+00			
13	VANADIUM	9.4E-07	NA	1.5E-09			
14	ACETONE	3.6E-08	NA	5.6E-11			
15	BENZENE	3.6E-08	NA	5.6E-11			
16	CARBON DISULFI	0.0E+00	NA	0.0E+00			
17	ETHYLBENZENE	3.6E-08	NA	5.6E-11			
18	METHYLISOBUTYL	3.6E-08	NA	5.6E-11			
19	TOLUENE	3.6E-08	NA	5.6E-11			
20	XYLENES, TOTAL	4.0E-08	NA	6.3E-11			
21	1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00			
22	1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00			
23	2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00			
24	2-METHYLNAPHTH	0.0E+00	NA	1.8E-11			
25	2-METHYLPHENOL	0.0E+00	NA	0.0E+00			
26	ACENAPHTHENE	0.0E+00	NA	2.2E-11			
27	ANTHRACENE	0.0E+00	NA	2.7E-11			
28	BENZO [a] ANTH	0.0E+00	NA	1.9E-11			
29	BENZO [a] PYRE	0.0E+00	NA	2.2E-11			
30	BENZO [b] FLUO	0.0E+00	NA	2.0E-11			
31	BENZO [g,h,i]	0.0E+00	NA	1.7E-11			
32	BENZO [k] FLUO	0.0E+00	NA	3.9E-11			
33	BIS (2-ETHYLHE	2.0E-08	NA	3.2E-11			
34	CHRYSENE	0.0E+00	NA	2.4E-11			
35	DIBENZ [a,h] A	0.0E+00	NA	0.0E+00			
36	FLUORANTHENE	0.0E+00	NA	2.9E-11			
37	FLUORENE	0.0E+00	NA	1.8E-11			
38	INDENO [1,2,3-	0.0E+00	NA	1.7E-11			
39	NAPHTHALENE	0.0E+00	NA	2.3E-11			
40	PHENANTHRENE	0.0E+00	NA	2.2E-11			
41	PHENOL	0.0E+00	NA	0.0E+00			
42	PYRENE	0.0E+00	NA	2.7E-11			

LIFETIME RISK SUMMARY

FUTURE
CONST-WORKER

LIFETIME EXCESS CANCER RISK

SCENARIO 1 ON-SITE SOIL ORAL (FROM WS1)	SCENARIO 2 ON-SITE SOIL DERMAL (FROM WS2)	SCENARIO 3 ON-SITE AIR-PART INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
NA	NA	NA			
2E-07	NA	6E-10			
NA	NA	0E+00			
NA	NA	0E+00			
NA	NA	6E-08			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
1E-09	NA	2E-12			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
3E-10	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			

43	2,2-BIS (PARA-	2.2E-08	NA	3.4E-11		7E-09	NA	1E-11			
44	2,2-BIS (PARA-	1.8E-08	NA	2.8E-11		6E-09	NA	NA			
45	2,2-BIS (PARA-	1.9E-08	NA	3.0E-11		4E-09	NA	NA			
46	ALDRIN	0.0E+00	NA	0.0E+00		0E+00	NA	0E+00			
47	ALPHA CHLORDAN	1.4E-08	NA	2.2E-11		2E-08	NA	3E-11			
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00		NA	NA	NA			
49	BENZOIC ACID	0.0E+00	NA	0.0E+00		NA	NA	NA			
50	BETA-ENDOSULFA	4.5E-09	NA	7.0E-12		NA	NA	NA			
51	DIELDRIN	1.8E-08	NA	2.8E-11		3E-07	NA	4E-10			
52	GAMMA-CHLORDAN	1.1E-08	NA	1.7E-11		1E-08	NA	2E-11			
53	HEPTACHLOR	1.8E-08	NA	2.8E-11		8E-08	NA	1E-10			
54	HEPTACHLOR EPO	0.0E+00	NA	2.8E-11		0E+00	NA	3E-10			
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
56	METHOXYCHLOR	7.5E-09	NA	1.2E-11		NA	NA	NA			
57	PCB 1260	2.2E-08	1.4E-08	3.4E-11		2E-07	1E-07	NA			
58	2,4,5-TRICHLOR	2.0E-10	NA	3.2E-13		NA	NA	NA			
59	2,4-DICHLOROPH	9.1E-10	NA	1.4E-12		NA	NA	NA			
60	2-(2,4,5-TRICH	2.3E-10	NA	3.7E-13		NA	NA	NA			
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00		NA	NA	NA			
					TOTAL PATHWAY CANCER RISK	8E-07	1E-07	6E-08	0E+00	0E+00	0E+00
					POPULATION TOTAL EXCESS RISK	1.0E-06					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP2
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-ADULT

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (F AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (F AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 RESIDENCE AIR-VOC INHALATION (FROM WS4)	SCENARIO 5 RESIDENCE SOIL ORAL (FROM WS5)	SCENARIO 6 RESIDENCE SOIL DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
2	BARIUM	1.2E-10	0.0E+00	1.1E-09	0.0E+00	7.4E-05	NA
3	BERYLLIUM	1.9E-12	0.0E+00	1.2E-11	0.0E+00	1.1E-06	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6	CHROMIUM	2.2E-11	0.0E+00	2.7E-10	0.0E+00	2.0E-05	NA
7	MERCURY	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
8	NICKEL	5.5E-12	0.0E+00	6.3E-11	0.0E+00	1.5E-05	NA
9	NITRATE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	2.2E-11	0.0E+00	2.4E-10	0.0E+00	2.2E-05	NA
14	ACETONE	8.7E-13	1.9E-17	1.0E-11	1.3E-14	8.5E-07	NA
15	BENZENE	8.7E-13	1.3E-19	1.0E-11	9.0E-17	8.5E-07	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	8.7E-13	5.9E-21	1.0E-11	4.2E-18	8.5E-07	NA
18	METHYLISOBUTYL	8.7E-13	2.4E-21	1.0E-11	1.7E-18	8.5E-07	NA
19	TOLUENE	8.7E-13	2.4E-20	1.0E-11	1.7E-17	8.5E-07	NA
20	XYLENES, TOTAL	8.7E-13	8.7E-20	1.0E-11	5.9E-17	9.6E-07	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	4.8E-13	0.0E+00	2.8E-12	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	4.8E-13	0.0E+00	8.9E-12	0.0E+00	0.0E+00	NA
27	ANTHRACENE	4.8E-13	0.0E+00	1.3E-11	0.0E+00	0.0E+00	NA
28	BENZO [a] ANTH	3.1E-12	0.0E+00	2.8E-11	0.0E+00	0.0E+00	NA
29	BENZO [a] PYRE	1.2E-12	0.0E+00	2.2E-11	0.0E+00	0.0E+00	NA
30	BENZO [b] FLUO	1.2E-12	0.0E+00	2.4E-11	0.0E+00	0.0E+00	NA
31	BENZO [g,h,i]	6.0E-13	0.0E+00	9.4E-12	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	1.2E-12	0.0E+00	1.8E-11	0.0E+00	0.0E+00	NA
33	BIS (2-ETHYLHE	4.8E-13	0.0E+00	2.8E-12	0.0E+00	4.8E-07	NA
34	CHRYSENE	1.5E-12	0.0E+00	2.8E-11	0.0E+00	0.0E+00	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	2.8E-12	0.0E+00	4.2E-11	0.0E+00	0.0E+00	NA
37	FLUORENE	4.8E-13	0.0E+00	7.7E-12	0.0E+00	0.0E+00	NA
38	INDENO [1,2,3-	7.5E-13	0.0E+00	1.1E-11	0.0E+00	0.0E+00	NA
39	NAPHTHALENE	4.8E-13	2.2E-22	2.8E-12	1.5E-19	0.0E+00	NA
40	PHENANTHRENE	2.8E-12	0.0E+00	3.5E-11	0.0E+00	0.0E+00	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	3.1E-12	0.0E+00	3.9E-11	0.0E+00	0.0E+00	NA

SUBCHRONIC RISK SUMMARY

FUTURE
RES-ADULT

SUBCHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (F AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (F AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 RESIDENCE AIR-VOC INHALATION (FROM WS4)	SCENARIO 5 RESIDENCE SOIL ORAL (FROM WS5)	SCENARIO 6 RESIDENCE SOIL DERMAL (FROM WS6)
1	ARSENIC	NA	NA	NA	NA	0E+00	NA
2	BARIUM	1E-07	0E+00	1E-06	0E+00	1E-03	NA
3	BERYLLIUM	NA	NA	NA	NA	2E-04	NA
4	CADMIUM (FOOD)	NA	NA	NA	NA	NA	NA
5	CADMIUM (WATER	NA	NA	NA	NA	NA	NA
6	CHROMIUM	4E-06	0E+00	5E-05	0E+00	1E-03	NA
7	MERCURY	0E+00	0E+00	0E+00	0E+00	0E+00	NA
8	NICKEL	NA	NA	NA	NA	8E-04	NA
9	NITRATE	NA	NA	NA	NA	NA	NA
10	NITRITE	NA	NA	NA	NA	NA	NA
11	SILVER	NA	NA	NA	NA	0E+00	NA
12	THALLIUM	NA	NA	NA	NA	0E+00	NA
13	VANADIUM	NA	NA	NA	NA	3E-03	NA
14	ACETONE	NA	NA	NA	NA	9E-07	NA
15	BENZENE	NA	NA	NA	NA	NA	NA
16	CARBON DISULFI	0E+00	0E+00	0E+00	0E+00	0E+00	NA
17	ETHYLBENZENE	3E-12	0E+00	3E-11	0E+00	9E-07	NA
18	METHYLISOBUTYL	4E-12	0E+00	5E-11	0E+00	2E-06	NA
19	TOLUENE	2E-12	0E+00	2E-11	0E+00	4E-07	NA
20	XYLENES, TOTAL	1E-11	0E+00	1E-10	0E+00	2E-07	NA
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
23	2,4-DIMETHYLPH	NA	NA	NA	NA	0E+00	NA
24	2-METHYLNAPHTH	NA	NA	NA	NA	0E+00	NA
25	2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
26	ACENAPHTHENE	NA	NA	NA	NA	0E+00	NA
27	ANTHRACENE	NA	NA	NA	NA	0E+00	NA
28	BENZO [a] ANTH	NA	NA	NA	NA	0E+00	NA
29	BENZO [a] PYRE	NA	NA	NA	NA	0E+00	NA
30	BENZO [b] FLUO	NA	NA	NA	NA	0E+00	NA
31	BENZO [g,h,i]	NA	NA	NA	NA	0E+00	NA
32	BENZO [k] FLUO	NA	NA	NA	NA	0E+00	NA
33	BIS (2-ETHYLHE	NA	NA	NA	NA	2E-05	NA
34	CHRYSENE	NA	NA	NA	NA	0E+00	NA
35	DIBENZ [a,h] A	NA	NA	NA	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	NA	NA	0E+00	NA
37	FLUORENE	NA	NA	NA	NA	0E+00	NA
38	INDENO [1,2,3-	NA	NA	NA	NA	0E+00	NA
39	NAPHTHALENE	NA	NA	NA	NA	0E+00	NA
40	PHENANTHRENE	NA	NA	NA	NA	0E+00	NA
41	PHENOL	NA	NA	NA	NA	0E+00	NA
42	PYRENE	NA	NA	NA	NA	0E+00	NA

43	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	0.0E+00	5.2E-07	NA	NA	NA	NA	NA	1E-03	NA
44	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.3E-07	NA	NA	NA	NA	NA	NA	NA
45	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.5E-07	NA	NA	NA	NA	NA	NA	NA
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3.3E-07	NA	NA	NA	NA	NA	6E-03	NA
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
49	BENZOIC ACID	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-07	NA	NA	NA	NA	NA	5E-04	NA
51	DIELDRIN	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.2E-07	NA	NA	NA	NA	NA	8E-03	NA
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.6E-07	NA	NA	NA	NA	NA	4E-03	NA
53	HEPTACHLOR	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.2E-07	NA	NA	NA	NA	NA	8E-04	NA
54	HEPTACHLOR EPO	2.5E-12	0.0E+00	1.4E-11	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-07	NA	NA	NA	NA	NA	4E-05	NA
57	PCB 1260	2.5E-12	0.0E+00	1.4E-11	0.0E+00	5.2E-07	1.3E-06	NA	NA	NA	NA	NA	NA
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.8E-09	NA	NA	NA	NA	NA	5E-08	NA
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.2E-08	NA	NA	NA	NA	NA	2E-06	NA
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5.6E-09	NA	NA	NA	NA	NA	7E-07	NA
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA

PATHWAY SUM (HI)	4E-06	0E+00	5E-05	0E+00	3E-02	0E+00
POPULATION TOTAL	3E-02					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP2
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-ADULT

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (F AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (F AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 RESIDENCE AIR-VOC INHALATION (FROM WS4)	SCENARIO 5 RESIDENCE SOIL ORAL (FROM WS5)	SCENARIO 6 RESIDENCE SOIL DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
2	BARIUM	1.2E-10	0.0E+00	1.1E-09	0.0E+00	7.4E-05	NA
3	BERYLLIUM	1.9E-12	0.0E+00	1.2E-11	0.0E+00	1.1E-06	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6	CHROMIUM	2.2E-11	0.0E+00	2.7E-10	0.0E+00	2.0E-05	NA
7	MERCURY	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
8	NICKEL	5.5E-12	0.0E+00	6.3E-11	0.0E+00	1.5E-05	NA
9	NITRATE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	2.2E-11	0.0E+00	2.4E-10	0.0E+00	2.2E-05	NA
14	ACETONE	8.7E-13	1.9E-17	1.0E-11	1.3E-14	8.5E-07	NA
15	BENZENE	8.7E-13	1.3E-19	1.0E-11	9.0E-17	8.5E-07	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	8.7E-13	5.9E-21	1.0E-11	4.2E-18	8.5E-07	NA
18	METHYLISOBUTYL	8.7E-13	2.4E-21	1.0E-11	1.7E-18	8.5E-07	NA
19	TOLUENE	8.7E-13	2.4E-20	1.0E-11	1.7E-17	8.5E-07	NA
20	XYLENES, TOTAL	8.7E-13	8.7E-20	1.0E-11	5.9E-17	9.6E-07	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	4.8E-13	0.0E+00	2.8E-12	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	4.8E-13	0.0E+00	8.9E-12	0.0E+00	0.0E+00	NA
27	ANTHRACENE	4.8E-13	0.0E+00	1.3E-11	0.0E+00	0.0E+00	NA
28	BENZO [a] ANTH	3.1E-12	0.0E+00	2.8E-11	0.0E+00	0.0E+00	NA
29	BENZO [a] PYRE	1.2E-12	0.0E+00	2.2E-11	0.0E+00	0.0E+00	NA
30	BENZO [b] FLUO	1.2E-12	0.0E+00	2.4E-11	0.0E+00	0.0E+00	NA
31	BENZO [g,h,i]	6.0E-13	0.0E+00	9.4E-12	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	1.2E-12	0.0E+00	1.8E-11	0.0E+00	0.0E+00	NA
33	BIS (2-ETHYLHE	4.8E-13	0.0E+00	2.8E-12	0.0E+00	4.8E-07	NA
34	CHRYSENE	1.5E-12	0.0E+00	2.8E-11	0.0E+00	0.0E+00	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	2.8E-12	0.0E+00	4.2E-11	0.0E+00	0.0E+00	NA
37	FLUORENE	4.8E-13	0.0E+00	7.7E-12	0.0E+00	0.0E+00	NA
38	INDENO [1,2,3-	7.5E-13	0.0E+00	1.1E-11	0.0E+00	0.0E+00	NA
39	NAPHTHALENE	4.8E-13	2.2E-22	2.8E-12	1.5E-19	0.0E+00	NA
40	PHENANTHRENE	2.8E-12	0.0E+00	3.5E-11	0.0E+00	0.0E+00	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	3.1E-12	0.0E+00	3.9E-11	0.0E+00	0.0E+00	NA

CHRONIC RISK SUMMARY

FUTURE
RES-ADULT

CHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (F AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (F AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 RESIDENCE AIR-VOC INHALATION (FROM WS4)	SCENARIO 5 RESIDENCE SOIL ORAL (FROM WS5)	SCENARIO 6 RESIDENCE SOIL DERMAL (FROM WS6)
1	ARSENIC	NA	NA	NA	NA	0E+00	NA
2	BARIUM	1E-06	0E+00	1E-05	0E+00	1E-03	NA
3	BERYLLIUM	NA	NA	NA	NA	2E-04	NA
4	CADMIUM (FOOD)	NA	NA	NA	NA	0E+00	0E+00
5	CADMIUM (WATER	NA	NA	NA	NA	0E+00	0E+00
6	CHROMIUM	4E-05	0E+00	5E-04	0E+00	4E-03	NA
7	MERCURY	0E+00	0E+00	0E+00	0E+00	0E+00	NA
8	NICKEL	NA	NA	NA	NA	8E-04	NA
9	NITRATE	NA	NA	NA	NA	0E+00	NA
10	NITRITE	NA	NA	NA	NA	0E+00	NA
11	SILVER	NA	NA	NA	NA	0E+00	NA
12	THALLIUM	NA	NA	NA	NA	0E+00	NA
13	VANADIUM	NA	NA	NA	NA	3E-03	NA
14	ACETONE	NA	NA	NA	NA	9E-06	NA
15	BENZENE	NA	NA	NA	NA	NA	NA
16	CARBON DISULFI	0E+00	0E+00	0E+00	0E+00	0E+00	NA
17	ETHYLBENZENE	3E-12	0E+00	3E-11	0E+00	9E-06	NA
18	METHYLISOBUTYL	4E-11	0E+00	5E-10	0E+00	2E-05	NA
19	TOLUENE	2E-12	0E+00	2E-11	0E+00	4E-06	NA
20	XYLENES, TOTAL	1E-11	0E+00	1E-10	0E+00	5E-07	NA
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
23	2,4-DIMETHYLPH	NA	NA	NA	NA	0E+00	NA
24	2-METHYLNAPHTH	NA	NA	NA	NA	0E+00	NA
25	2-METHYLPHENOL	NA	NA	NA	NA	0E+00	NA
26	ACENAPHTHENE	NA	NA	NA	NA	0E+00	NA
27	ANTHRACENE	NA	NA	NA	NA	0E+00	NA
28	BENZO [a] ANTH	NA	NA	NA	NA	0E+00	NA
29	BENZO [a] PYRE	NA	NA	NA	NA	0E+00	NA
30	BENZO [b] FLUO	NA	NA	NA	NA	0E+00	NA
31	BENZO [g,h,i]	NA	NA	NA	NA	0E+00	NA
32	BENZO [k] FLUO	NA	NA	NA	NA	0E+00	NA
33	BIS (2-ETHYLHE	NA	NA	NA	NA	2E-05	NA
34	CHRYSENE	NA	NA	NA	NA	0E+00	NA
35	DIBENZ [a,h] A	NA	NA	NA	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	NA	NA	0E+00	NA
37	FLUORENE	NA	NA	NA	NA	0E+00	NA
38	INDENO [1,2,3-	NA	NA	NA	NA	0E+00	NA
39	NAPHTHALENE	NA	NA	NA	NA	0E+00	NA
40	PHENANTHRENE	NA	NA	NA	NA	0E+00	NA
41	PHENOL	NA	NA	NA	NA	0E+00	NA
42	PYRENE	NA	NA	NA	NA	0E+00	NA

43	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	0.0E+00	5.2E-07	NA	NA	NA	NA	NA	1E-03	NA
44	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.3E-07	NA	NA	NA	NA	NA	NA	NA
45	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.5E-07	NA	NA	NA	NA	NA	NA	NA
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3.3E-07	NA	NA	NA	NA	NA	6E-03	NA
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
49	BENZOIC ACID	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.1E-07	NA	NA	NA	NA	NA	2E-03	NA
51	DIELDRIN	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.2E-07	NA	NA	NA	NA	NA	8E-03	NA
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.6E-07	NA	NA	NA	NA	NA	4E-03	NA
53	HEPTACHLOR	2.5E-12	0.0E+00	1.4E-11	0.0E+00	4.2E-07	NA	NA	NA	NA	NA	8E-04	NA
54	HEPTACHLOR EPO	2.5E-12	0.0E+00	1.4E-11	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-07	NA	NA	NA	NA	NA	4E-05	NA
57	PCB 1260	2.5E-12	0.0E+00	1.4E-11	0.0E+00	5.2E-07	1.3E-06	NA	NA	NA	NA	NA	NA
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.8E-09	NA	NA	NA	NA	NA	5E-07	NA
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.2E-08	NA	NA	NA	NA	NA	2E-06	NA
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	5.6E-09	NA	NA	NA	NA	NA	7E-07	NA
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
							PATHWAY SUM (HI)	4E-05	0E+00	5E-04	0E+00	3E-02	0E+00
							POPULATION TOTAL	3E-02					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP2
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-ADULT

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (F AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (F AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 RESIDENCE AIR-VOC INHALATION (FROM WS4)	SCENARIO 5 RESIDENCE SOIL ORAL (FROM WS5)	SCENARIO 6 RESIDENCE SOIL DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
2	BARIUM	5.0E-11	0.0E+00	4.6E-10	0.0E+00	3.2E-05	NA
3	BERYLLIUM	8.1E-13	0.0E+00	4.9E-12	0.0E+00	4.8E-07	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
6	CHROMIUM	9.2E-12	0.0E+00	1.1E-10	0.0E+00	8.7E-06	NA
7	MERCURY	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
8	NICKEL	2.3E-12	0.0E+00	2.6E-11	0.0E+00	6.6E-06	NA
9	NITRATE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	9.1E-12	0.0E+00	9.8E-11	0.0E+00	9.8E-06	NA
14	ACETONE	3.7E-13	7.8E-18	4.2E-12	5.5E-15	3.7E-07	NA
15	BENZENE	3.7E-13	5.5E-20	4.2E-12	3.9E-17	3.7E-07	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	3.7E-13	2.5E-21	4.2E-12	1.8E-18	3.7E-07	NA
18	METHYLISOBUTYL	3.7E-13	1.0E-21	4.2E-12	7.1E-19	3.7E-07	NA
19	TOLUENE	3.7E-13	1.0E-20	4.2E-12	7.1E-18	3.7E-07	NA
20	XYLENES, TOTAL	3.7E-13	3.6E-20	4.2E-12	2.5E-17	4.2E-07	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.0E-13	0.0E+00	1.2E-12	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.0E-13	0.0E+00	3.7E-12	0.0E+00	0.0E+00	NA
27	ANTHRACENE	2.0E-13	0.0E+00	5.5E-12	0.0E+00	0.0E+00	NA
28	BENZO [a] ANTH	1.3E-12	0.0E+00	1.2E-11	0.0E+00	0.0E+00	NA
29	BENZO [a] PYRE	5.2E-13	0.0E+00	9.2E-12	0.0E+00	0.0E+00	NA
30	BENZO [b] FLUO	5.2E-13	0.0E+00	9.9E-12	0.0E+00	0.0E+00	NA
31	BENZO [g,h,i]	2.5E-13	0.0E+00	3.9E-12	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	5.2E-13	0.0E+00	7.7E-12	0.0E+00	0.0E+00	NA
33	BIS (2-ETHYLHE	2.0E-13	0.0E+00	1.2E-12	0.0E+00	2.1E-07	NA
34	CHRYSENE	6.5E-13	0.0E+00	1.2E-11	0.0E+00	0.0E+00	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.2E-12	0.0E+00	1.8E-11	0.0E+00	0.0E+00	NA
37	FLUORENE	2.0E-13	0.0E+00	3.2E-12	0.0E+00	0.0E+00	NA
38	INDENO [1,2,3-	3.2E-13	0.0E+00	4.7E-12	0.0E+00	0.0E+00	NA
39	NAPHTHALENE	2.0E-13	9.2E-23	1.2E-12	6.6E-20	0.0E+00	NA
40	PHENANTHRENE	1.2E-12	0.0E+00	1.4E-11	0.0E+00	0.0E+00	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.3E-12	0.0E+00	1.6E-11	0.0E+00	0.0E+00	NA

LIFETIME RISK SUMMARY

FUTURE
RES-ADULT

LIFETIME EXCESS CANCER RISK

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (F AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (F AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 RESIDENCE AIR-VOC INHALATION (FROM WS4)	SCENARIO 5 RESIDENCE SOIL ORAL (FROM WS5)	SCENARIO 6 RESIDENCE SOIL DERMAL (FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	0E+00	0E+00	NA
2	BARIUM	NA	NA	NA	NA	NA	NA
3	BERYLLIUM	7E-12	0E+00	4E-11	0E+00	2E-06	NA
4	CADMIUM (FOOD)	0E+00	0E+00	0E+00	0E+00	NA	NA
5	CADMIUM (WATER	0E+00	0E+00	0E+00	0E+00	NA	NA
6	CHROMIUM	4E-10	0E+00	5E-09	0E+00	NA	NA
7	MERCURY	NA	NA	NA	NA	NA	NA
8	NICKEL	NA	NA	NA	NA	NA	NA
9	NITRATE	NA	NA	NA	NA	NA	NA
10	NITRITE	NA	NA	NA	NA	NA	NA
11	SILVER	NA	NA	NA	NA	NA	NA
12	THALLIUM	NA	NA	NA	NA	NA	NA
13	VANADIUM	NA	NA	NA	NA	NA	NA
14	ACETONE	NA	NA	NA	NA	NA	NA
15	BENZENE	0E+00	0E+00	0E+00	0E+00	1E-08	NA
16	CARBON DISULFI	NA	NA	NA	NA	NA	NA
17	ETHYLBENZENE	NA	NA	NA	NA	NA	NA
18	METHYLISOBUTYL	NA	NA	NA	NA	NA	NA
19	TOLUENE	NA	NA	NA	NA	NA	NA
20	XYLENES, TOTAL	NA	NA	NA	NA	NA	NA
21	1,2-DIMETHYLBE	NA	NA	NA	NA	NA	NA
22	1,3-DIMETHYLBE	NA	NA	NA	NA	NA	NA
23	2,4-DIMETHYLPH	NA	NA	NA	NA	NA	NA
24	2-METHYLNAPHTH	NA	NA	NA	NA	NA	NA
25	2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
26	ACENAPHTHENE	NA	NA	NA	NA	NA	NA
27	ANTHRACENE	NA	NA	NA	NA	NA	NA
28	BENZO [a] ANTH	NA	NA	NA	NA	0E+00	NA
29	BENZO [a] PYRE	NA	NA	NA	NA	0E+00	NA
30	BENZO [b] FLUO	NA	NA	NA	NA	0E+00	NA
31	BENZO [g,h,i]	NA	NA	NA	NA	NA	NA
32	BENZO [k] FLUO	NA	NA	NA	NA	0E+00	NA
33	BIS (2-ETHYLHE	NA	NA	NA	NA	3E-09	NA
34	CHRYSENE	NA	NA	NA	NA	0E+00	NA
35	DIBENZ [a,h] A	NA	NA	NA	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	NA	NA	NA	NA
37	FLUORENE	NA	NA	NA	NA	NA	NA
38	INDENO [1,2,3-	NA	NA	NA	NA	0E+00	NA
39	NAPHTHALENE	NA	NA	NA	NA	NA	NA
40	PHENANTHRENE	NA	NA	NA	NA	NA	NA
41	PHENOL	NA	NA	NA	NA	NA	NA
42	PYRENE	NA	NA	NA	NA	NA	NA

43	2,2-BIS (PARA-	1.0E-12	0.0E+00	6.0E-12	0.0E+00	2.3E-07	NA	0E+00	0E+00	2E-12	0E+00	8E-08	NA
44	2,2-BIS (PARA-	1.0E-12	0.0E+00	6.0E-12	0.0E+00	1.9E-07	NA	NA	NA	NA	NA	6E-08	NA
45	2,2-BIS (PARA-	1.0E-12	0.0E+00	6.0E-12	0.0E+00	2.0E-07	NA	NA	NA	NA	NA	5E-08	NA
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.5E-07	NA	0E+00	0E+00	0E+00	0E+00	2E-07	NA
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
49	BENZOIC ACID	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.7E-08	NA	NA	NA	NA	NA	NA	NA
51	DIELDRIN	1.0E-12	0.0E+00	6.0E-12	0.0E+00	1.9E-07	NA	2E-11	0E+00	1E-10	0E+00	3E-06	NA
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.2E-07	NA	0E+00	0E+00	0E+00	0E+00	1E-07	NA
53	HEPTACHLOR	1.0E-12	0.0E+00	6.0E-12	0.0E+00	1.8E-07	NA	5E-12	0E+00	3E-11	0E+00	8E-07	NA
54	HEPTACHLOR EPO	1.0E-12	0.0E+00	6.0E-12	0.0E+00	0.0E+00	NA	9E-12	0E+00	5E-11	0E+00	0E+00	NA
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	0E+00	NA
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	7.8E-08	NA	NA	NA	NA	NA	NA	NA
57	PCB 1260	1.0E-12	0.0E+00	6.0E-12	0.0E+00	2.3E-07	5.7E-07	NA	NA	NA	NA	2E-06	4E-06
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.1E-09	NA	NA	NA	NA	NA	NA	NA
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	9.5E-09	NA	NA	NA	NA	NA	NA	NA
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	2.4E-09	NA	NA	NA	NA	NA	NA	NA
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
						TOTAL PATHWAY CANCER RISK		4E-10	0E+00	5E-09	0E+00	8E-06	4E-06
						POPULATION TOTAL EXCESS RISK		1E-05					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP3
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
REC. ADULT

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (C AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (C AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 BALL FIELD AIR-PART INHALATION (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.2E-10	0.0E+00	1.1E-09	1.5E-09		
3	BERYLLIUM	1.9E-12	0.0E+00	1.2E-11	1.6E-11		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
6	CHROMIUM	2.2E-11	0.0E+00	2.7E-10	3.7E-10		
7	MERCURY	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
8	NICKEL	5.5E-12	0.0E+00	6.3E-11	8.7E-11		
9	NITRATE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
10	NITRITE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
11	SILVER	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
13	VANADIUM	2.2E-11	0.0E+00	2.4E-10	3.2E-10		
14	ACETONE	8.7E-13	1.8E-18	1.0E-11	1.4E-11		
15	BENZENE	8.7E-13	1.3E-20	1.0E-11	1.4E-11		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
17	ETHYLBENZENE	8.7E-13	5.9E-22	1.0E-11	1.4E-11		
18	METHYLISOBUTYL	8.7E-13	2.4E-22	1.0E-11	1.4E-11		
19	TOLUENE	8.7E-13	2.4E-21	1.0E-11	1.4E-11		
20	XYLENES, TOTAL	8.7E-13	8.4E-21	1.0E-11	1.4E-11		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
24	2-METHYLNAPHTH	4.8E-13	0.0E+00	2.8E-12	3.8E-12		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
26	ACENAPHTHENE	4.8E-13	0.0E+00	8.9E-12	1.2E-11		
27	ANTHRACENE	4.8E-13	0.0E+00	1.3E-11	1.8E-11		
28	BENZO [a] ANTH	3.1E-12	0.0E+00	2.8E-11	3.9E-11		
29	BENZO [a] PYRE	1.2E-12	0.0E+00	2.2E-11	3.0E-11		
30	BENZO [b] FLUO	1.2E-12	0.0E+00	2.4E-11	3.3E-11		
31	BENZO [g,h,i]	6.0E-13	0.0E+00	9.4E-12	1.3E-11		
32	BENZO [k] FLUO	1.2E-12	0.0E+00	1.8E-11	2.5E-11		
33	BIS (2-ETHYLHE	4.8E-13	0.0E+00	2.8E-12	3.8E-12		
34	CHRYSENE	1.5E-12	0.0E+00	2.8E-11	3.9E-11		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
36	FLUORANTHENE	2.8E-12	0.0E+00	4.2E-11	5.8E-11		
37	FLUORENE	4.8E-13	0.0E+00	7.7E-12	1.1E-11		
38	INDENO [1,2,3-	7.5E-13	0.0E+00	1.1E-11	1.6E-11		
39	NAPHTHALENE	4.8E-13	2.2E-23	2.8E-12	3.8E-12		
40	PHENANTHRENE	2.8E-12	0.0E+00	3.5E-11	4.8E-11		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
42	PYRENE	3.1E-12	0.0E+00	3.9E-11	5.4E-11		

SUBCHRONIC RISK SUMMARY

CURRENT
REC. ADULT

SUBCHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE (C AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE (C AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 PIC. GND AIR-PART INHALATION (FROM WS3)	SCENARIO 4 BALL FIELD AIR-PART INHALATION (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	NA	NA	NA	NA	0E+00	0E+00
2	BARIUM	1E-07	0E+00	1E-06	2E-06		
3	BERYLLIUM	NA	NA	NA	NA		
4	CADMIUM (FOOD)	NA	NA	NA	NA		
5	CADMIUM (WATER	NA	NA	NA	NA		
6	CHROMIUM	4E-06	0E+00	5E-05	6E-05		
7	MERCURY	0E+00	0E+00	0E+00	0E+00		
8	NICKEL	NA	NA	NA	NA		
9	NITRATE	NA	NA	NA	NA		
10	NITRITE	NA	NA	NA	NA		
11	SILVER	NA	NA	NA	NA		
12	THALLIUM	NA	NA	NA	NA		
13	VANADIUM	NA	NA	NA	NA		
14	ACETONE	NA	NA	NA	NA		
15	BENZENE	NA	NA	NA	NA		
16	CARBON DISULFI	0E+00	0E+00	0E+00	0E+00		
17	ETHYLBENZENE	3E-12	0E+00	3E-11	5E-11		
18	METHYLISOBUTYL	4E-12	0E+00	5E-11	7E-11		
19	TOLUENE	2E-12	0E+00	2E-11	2E-11		
20	XYLENES, TOTAL	1E-11	0E+00	1E-10	2E-10		
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00		
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00		
23	2,4-DIMETHYLPH	NA	NA	NA	NA		
24	2-METHYLNAPHTH	NA	NA	NA	NA		
25	2-METHYLPHENOL	NA	NA	NA	NA		
26	ACENAPHTHENE	NA	NA	NA	NA		
27	ANTHRACENE	NA	NA	NA	NA		
28	BENZO [a] ANTH	NA	NA	NA	NA		
29	BENZO [a] PYRE	NA	NA	NA	NA		
30	BENZO [b] FLUO	NA	NA	NA	NA		
31	BENZO [g,h,i]	NA	NA	NA	NA		
32	BENZO [k] FLUO	NA	NA	NA	NA		
33	BIS (2-ETHYLHE	NA	NA	NA	NA		
34	CHRYSENE	NA	NA	NA	NA		
35	DIBENZ [a,h] A	NA	NA	NA	NA		
36	FLUORANTHENE	NA	NA	NA	NA		
37	FLUORENE	NA	NA	NA	NA		
38	INDENO [1,2,3-	NA	NA	NA	NA		
39	NAPHTHALENE	NA	NA	NA	NA		
40	PHENANTHRENE	NA	NA	NA	NA		
41	PHENOL	NA	NA	NA	NA		
42	PYRENE	NA	NA	NA	NA		

43	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
44	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
45	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
49	BENZOIC ACID	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
51	DIELDRIN	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
53	HEPTACHLOR	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
54	HEPTACHLOR EPO	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
57	PCB 1260	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00		
						PATHWAY SUM (HI)	4E-06	0E+00	5E-05	6E-05	0E+00	0E+00
						POPULATION TOTAL	1E-04					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP3
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

CURRENT
REC. ADULT

	CHRONIC DAILY INTAKE (mg/kg/day)					
	SCENARIO 1 CAM-LAKE (C AIR-PART INHALATION	SCENARIO 2 CAM-LAKE (C AIR-VOC INHALATION	SCENARIO 3 PIC. GND AIR-PART INHALATION	SCENARIO 4 BALL FIELD AIR-PART INHALATION	SCENARIO 5 0 0 0	SCENARIO 6 0 0 0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2 BARIUM	1.2E-10	0.0E+00	1.1E-09	1.5E-09		
3 BERYLLIUM	1.9E-12	0.0E+00	1.2E-11	1.6E-11		
4 CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5 CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
6 CHROMIUM	2.2E-11	0.0E+00	2.7E-10	3.7E-10		
7 MERCURY	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
8 NICKEL	5.5E-12	0.0E+00	6.3E-11	8.7E-11		
9 NITRATE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
10 NITRITE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
11 SILVER	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
12 THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
13 VANADIUM	2.2E-11	0.0E+00	2.4E-10	3.2E-10		
14 ACETONE	8.7E-13	1.8E-18	1.0E-11	1.4E-11		
15 BENZENE	8.7E-13	1.3E-20	1.0E-11	1.4E-11		
16 CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
17 ETHYLBENZENE	8.7E-13	5.9E-22	1.0E-11	1.4E-11		
18 METHYLISOBUTYL	8.7E-13	2.4E-22	1.0E-11	1.4E-11		
19 TOLUENE	8.7E-13	2.4E-21	1.0E-11	1.4E-11		
20 XYLENES, TOTAL	8.7E-13	8.4E-21	1.0E-11	1.4E-11		
21 1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
22 1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
23 2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
24 2-METHYLNAPHTH	4.8E-13	0.0E+00	2.8E-12	3.8E-12		
25 2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
26 ACENAPHTHENE	4.8E-13	0.0E+00	8.9E-12	1.2E-11		
27 ANTHRACENE	4.8E-13	0.0E+00	1.3E-11	1.8E-11		
28 BENZO [a] ANTH	3.1E-12	0.0E+00	2.8E-11	3.9E-11		
29 BENZO [a] PYRE	1.2E-12	0.0E+00	2.2E-11	3.0E-11		
30 BENZO [b] FLUO	1.2E-12	0.0E+00	2.4E-11	3.3E-11		
31 BENZO [g,h,i]	6.0E-13	0.0E+00	9.4E-12	1.3E-11		
32 BENZO [k] FLUO	1.2E-12	0.0E+00	1.8E-11	2.5E-11		
33 BIS (2-ETHYLHE	4.8E-13	0.0E+00	2.8E-12	3.8E-12		
34 CHRYSENE	1.5E-12	0.0E+00	2.8E-11	3.9E-11		
35 DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
36 FLUORANTHENE	2.8E-12	0.0E+00	4.2E-11	5.8E-11		
37 FLUORENE	4.8E-13	0.0E+00	7.7E-12	1.1E-11		
38 INDENO [1,2,3-	7.5E-13	0.0E+00	1.1E-11	1.6E-11		
39 NAPHTHALENE	4.8E-13	2.2E-23	2.8E-12	3.8E-12		
40 PHENANTHRENE	2.8E-12	0.0E+00	3.5E-11	4.8E-11		
41 PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
42 PYRENE	3.1E-12	0.0E+00	3.9E-11	5.4E-11		

CHRONIC RISK SUMMARY

CURRENT
REC. ADULT

	CHRONIC HAZARD QUOTIENT					
	SCENARIO 1 CAM-LAKE (C AIR-PART INHALATION	SCENARIO 2 CAM-LAKE (C AIR-VOC INHALATION	SCENARIO 3 PIC. GND AIR-PART INHALATION	SCENARIO 4 BALL FIELD AIR-PART INHALATION	SCENARIO 5 0 0 0	SCENARIO 6 0 0 0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	NA	NA	NA	NA	0E+00	0E+00
2 BARIUM	1E-06	0E+00	1E-05	2E-05		
3 BERYLLIUM	NA	NA	NA	NA		
4 CADMIUM (FOOD)	NA	NA	NA	NA		
5 CADMIUM (WATER	NA	NA	NA	NA		
6 CHROMIUM	4E-05	0E+00	5E-04	6E-04		
7 MERCURY	0E+00	0E+00	0E+00	0E+00		
8 NICKEL	NA	NA	NA	NA		
9 NITRATE	NA	NA	NA	NA		
10 NITRITE	NA	NA	NA	NA		
11 SILVER	NA	NA	NA	NA		
12 THALLIUM	NA	NA	NA	NA		
13 VANADIUM	NA	NA	NA	NA		
14 ACETONE	NA	NA	NA	NA		
15 BENZENE	NA	NA	NA	NA		
16 CARBON DISULFI	0E+00	0E+00	0E+00	0E+00		
17 ETHYLBENZENE	3E-12	0E+00	3E-11	5E-11		
18 METHYLISOBUTYL	4E-11	0E+00	5E-10	7E-10		
19 TOLUENE	2E-12	0E+00	2E-11	2E-11		
20 XYLENES, TOTAL	1E-11	0E+00	1E-10	2E-10		
21 1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00		
22 1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00		
23 2,4-DIMETHYLPH	NA	NA	NA	NA		
24 2-METHYLNAPHTH	NA	NA	NA	NA		
25 2-METHYLPHENOL	NA	NA	NA	NA		
26 ACENAPHTHENE	NA	NA	NA	NA		
27 ANTHRACENE	NA	NA	NA	NA		
28 BENZO [a] ANTH	NA	NA	NA	NA		
29 BENZO [a] PYRE	NA	NA	NA	NA		
30 BENZO [b] FLUO	NA	NA	NA	NA		
31 BENZO [g,h,i]	NA	NA	NA	NA		
32 BENZO [k] FLUO	NA	NA	NA	NA		
33 BIS (2-ETHYLHE	NA	NA	NA	NA		
34 CHRYSENE	NA	NA	NA	NA		
35 DIBENZ [a,h] A	NA	NA	NA	NA		
36 FLUORANTHENE	NA	NA	NA	NA		
37 FLUORENE	NA	NA	NA	NA		
38 INDENO [1,2,3-	NA	NA	NA	NA		
39 NAPHTHALENE	NA	NA	NA	NA		
40 PHENANTHRENE	NA	NA	NA	NA		
41 PHENOL	NA	NA	NA	NA		
42 PYRENE	NA	NA	NA	NA		

43	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
44	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
45	2,2-BIS (PARA-	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
49	BENZOIC ACID	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
51	DIELDRIN	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
53	HEPTACHLOR	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
54	HEPTACHLOR EPO	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
57	PCB 1260	2.5E-12	0.0E+00	1.4E-11	2.0E-11		NA	NA	NA	NA		
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00		
						PATHWAY SUM (HI)	4E-05	0E+00	5E-04	6E-04	0E+00	0E+00
						POPULATION TOTAL	1E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP3
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

CURRENT
REC. ADULT

		LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (C	CAM-LAKE (C	PIC. GND	BALL FIELD	0	0
		AIR-PART	AIR-VOC	AIR-PART	AIR-PART	0	0
		INHALATION	INHALATION	INHALATION	INHALATION	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	5.0E-11	0.0E+00	4.6E-10	6.6E-10		
3	BERYLLIUM	8.1E-13	0.0E+00	4.9E-12	6.9E-12		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
6	CHROMIUM	9.2E-12	0.0E+00	1.1E-10	1.6E-10		
7	MERCURY	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
8	NICKEL	2.3E-12	0.0E+00	2.6E-11	3.7E-11		
9	NITRATE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
10	NITRITE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
11	SILVER	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
13	VANADIUM	9.1E-12	0.0E+00	9.8E-11	1.4E-10		
14	ACETONE	3.7E-13	7.7E-19	4.2E-12	6.0E-12		
15	BENZENE	3.7E-13	5.3E-21	4.2E-12	6.0E-12		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
17	ETHYLBENZENE	3.7E-13	2.5E-22	4.2E-12	6.0E-12		
18	METHYLISOBUTYL	3.7E-13	9.9E-23	4.2E-12	6.0E-12		
19	TOLUENE	3.7E-13	9.9E-22	4.2E-12	6.0E-12		
20	XYLENES, TOTAL	3.7E-13	3.5E-21	4.2E-12	6.0E-12		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
24	2-METHYLNAPHTH	2.0E-13	0.0E+00	1.2E-12	1.6E-12		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
26	ACENAPHTHENE	2.0E-13	0.0E+00	3.7E-12	5.2E-12		
27	ANTHRACENE	2.0E-13	0.0E+00	5.5E-12	7.8E-12		
28	BENZO [a] ANTH	1.3E-12	0.0E+00	1.2E-11	1.7E-11		
29	BENZO [a] PYRE	5.2E-13	0.0E+00	9.2E-12	1.3E-11		
30	BENZO [b] FLUO	5.2E-13	0.0E+00	9.9E-12	1.4E-11		
31	BENZO [g,h,i]	2.5E-13	0.0E+00	3.9E-12	5.6E-12		
32	BENZO [k] FLUO	5.2E-13	0.0E+00	7.7E-12	1.1E-11		
33	BIS (2-ETHYLHE	2.0E-13	0.0E+00	1.2E-12	1.6E-12		
34	CHRYSENE	6.5E-13	0.0E+00	1.2E-11	1.7E-11		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
36	FLUORANTHENE	1.2E-12	0.0E+00	1.8E-11	2.5E-11		
37	FLUORENE	2.0E-13	0.0E+00	3.2E-12	4.5E-12		
38	INDENO [1,2,3-	3.2E-13	0.0E+00	4.7E-12	6.7E-12		
39	NAPHTHALENE	2.0E-13	9.1E-24	1.2E-12	1.6E-12		
40	PHENANTHRENE	1.2E-12	0.0E+00	1.4E-11	2.1E-11		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
42	PYRENE	1.3E-12	0.0E+00	1.6E-11	2.3E-11		

LIFETIME RISK SUMMARY

CURRENT
REC. ADULT

LIFETIME EXCESS CANCER RISK					
SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
CAM-LAKE (C	CAM-LAKE (C	PIC. GND	BALL FIELD	0	0
AIR-PART	AIR-VOC	AIR-PART	AIR-PART	0	0
INHALATION	INHALATION	INHALATION	INHALATION	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NA	NA	NA	NA		
7E-12	0E+00	4E-11	6E-11		
0E+00	0E+00	0E+00	0E+00		
0E+00	0E+00	0E+00	0E+00		
4E-10	0E+00	5E-09	7E-09		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	0E+00		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		

43	2,2-BIS (PARA-	1.0E-12	0.0E+00	6.0E-12	8.5E-12		0E+00	0E+00	2E-12	3E-12		
44	2,2-BIS (PARA-	1.0E-12	0.0E+00	6.0E-12	8.5E-12		NA	NA	NA	NA		
45	2,2-BIS (PARA-	1.0E-12	0.0E+00	6.0E-12	8.5E-12		NA	NA	NA	NA		
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00		
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00		
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
49	BENZOIC ACID	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
51	DIELDRIN	1.0E-12	0.0E+00	6.0E-12	8.5E-12		2E-11	0E+00	1E-10	1E-10		
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00		
53	HEPTACHLOR	1.0E-12	0.0E+00	6.0E-12	8.5E-12		5E-12	0E+00	3E-11	4E-11		
54	HEPTACHLOR EPO	1.0E-12	0.0E+00	6.0E-12	8.5E-12		9E-12	0E+00	5E-11	8E-11		
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
57	PCB 1260	1.0E-12	0.0E+00	6.0E-12	8.5E-12		NA	NA	NA	NA		
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
						TOTAL PATHWAY CANCER RISK	4E-10	0E+00	5E-09	7E-09	0E+00	0E+00
						POPULATION TOTAL EXCESS RISK	1E-08					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP4
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-ADULT (B)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 PCB POLES SOIL ORAL (FROM WS1)	SCENARIO 2 PCB POLES SOIL DERMAL (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	NA				
3	BERYLLIUM	0.0E+00	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	0.0E+00	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	0.0E+00	NA				
14	ACETONE	0.0E+00	NA				
15	BENZENE	0.0E+00	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	0.0E+00	NA				
18	METHYLISOBUTYL	0.0E+00	NA				
19	TOLUENE	0.0E+00	NA				
20	XYLENES, TOTAL	0.0E+00	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	0.0E+00	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	0.0E+00	NA				
27	ANTHRACENE	0.0E+00	NA				
28	BENZO [a] ANTH	0.0E+00	NA				
29	BENZO [a] PYRE	0.0E+00	NA				
30	BENZO [b] FLUO	0.0E+00	NA				
31	BENZO [g,h,i]	0.0E+00	NA				
32	BENZO [k] FLUO	0.0E+00	NA				
33	BIS (2-ETHYLHE	0.0E+00	NA				
34	CHRYSENE	0.0E+00	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	0.0E+00	NA				
37	FLUORENE	0.0E+00	NA				
38	INDENO [1,2,3-	0.0E+00	NA				
39	NAPHTHALENE	0.0E+00	NA				
40	PHENANTHRENE	0.0E+00	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	0.0E+00	NA				

SUBCHRONIC RISK SUMMARY

FUTURE
RES-ADULT (B)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 PCB POLES SOIL ORAL (FROM WS1)	SCENARIO 2 PCB POLES SOIL DERMAL (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
0E+00	NA				
0E+00	NA				
NA	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				

43	2,2-BIS (PARA-	1.0E-08	NA		2E-05	NA				
44	2,2-BIS (PARA-	3.9E-10	NA		NA	NA				
45	2,2-BIS (PARA-	3.2E-09	NA		NA	NA				
46	ALDRIN	0.0E+00	NA		0E+00	NA				
47	ALPHA CHLORDAN	3.3E-10	NA		5E-06	NA				
48	BENZALDEHYDE	0.0E+00	NA		0E+00	NA				
49	BENZOIC ACID	0.0E+00	NA		0E+00	NA				
50	BETA-ENDOSULFA	6.3E-11	NA		3E-07	NA				
51	DIELDRIN	1.1E-11	NA		2E-07	NA				
52	GAMMA-CHLORDAN	2.7E-10	NA		4E-06	NA				
53	HEPTACHLOR	1.4E-11	NA		3E-08	NA				
54	HEPTACHLOR EPO	2.1E-11	NA		NA	NA				
55	LINDANE / GAMA	0.0E+00	NA		0E+00	NA				
56	METHOXYCHLOR	3.5E-09	NA		7E-07	NA				
57	PCB 1260	1.0E-09	3.2E-08		NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	NA		0E+00	NA				
59	2,4-DICHLOROPH	0.0E+00	NA		0E+00	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA		0E+00	NA				
61	TRICHLOROFLUOR	0.0E+00	NA		0E+00	NA				
				PATHWAY SUM (HI)	3E-05	0E+00	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL	3E-05					

RANGE NAME: CSUH

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP4
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-ADULT (B)

CHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	NA				
3	BERYLLIUM	0.0E+00	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	0.0E+00	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	0.0E+00	NA				
14	ACETONE	0.0E+00	NA				
15	BENZENE	0.0E+00	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	0.0E+00	NA				
18	METHYLISOBUTYL	0.0E+00	NA				
19	TOLUENE	0.0E+00	NA				
20	XYLENES, TOTAL	0.0E+00	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	0.0E+00	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	0.0E+00	NA				
27	ANTHRACENE	0.0E+00	NA				
28	BENZO [a] ANTH	0.0E+00	NA				
29	BENZO [a] PYRE	0.0E+00	NA				
30	BENZO [b] FLUO	0.0E+00	NA				
31	BENZO [g,h,i]	0.0E+00	NA				
32	BENZO [k] FLUO	0.0E+00	NA				
33	BIS (2-ETHYLHE	0.0E+00	NA				
34	CHRYSENE	0.0E+00	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	0.0E+00	NA				
37	FLUORENE	0.0E+00	NA				
38	INDENO [1,2,3-	0.0E+00	NA				
39	NAPHTHALENE	0.0E+00	NA				
40	PHENANTHRENE	0.0E+00	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	0.0E+00	NA				

CHRONIC RISK SUMMARY

FUTURE
RES-ADULT (B)

CHRONIC HAZARD QUOTIENT

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	NA	0E+00	0E+00	0E+00	0E+00
2	BARIUM	0E+00	NA				
3	BERYLLIUM	0E+00	NA				
4	CADMIUM (FOOD)	0E+00	0E+00				
5	CADMIUM (WATER	0E+00	0E+00				
6	CHROMIUM	0E+00	NA				
7	MERCURY	0E+00	NA				
8	NICKEL	0E+00	NA				
9	NITRATE	0E+00	NA				
10	NITRITE	0E+00	NA				
11	SILVER	0E+00	NA				
12	THALLIUM	0E+00	NA				
13	VANADIUM	0E+00	NA				
14	ACETONE	0E+00	NA				
15	BENZENE	NA	NA				
16	CARBON DISULFI	0E+00	NA				
17	ETHYLBENZENE	0E+00	NA				
18	METHYLISOBUTYL	0E+00	NA				
19	TOLUENE	0E+00	NA				
20	XYLENES, TOTAL	0E+00	NA				
21	1,2-DIMETHYLBE	0E+00	NA				
22	1,3-DIMETHYLBE	0E+00	NA				
23	2,4-DIMETHYLPH	0E+00	NA				
24	2-METHYLNAPHTH	0E+00	NA				
25	2-METHYLPHENOL	0E+00	NA				
26	ACENAPHTHENE	0E+00	NA				
27	ANTHRACENE	0E+00	NA				
28	BENZO [a] ANTH	0E+00	NA				
29	BENZO [a] PYRE	0E+00	NA				
30	BENZO [b] FLUO	0E+00	NA				
31	BENZO [g,h,i]	0E+00	NA				
32	BENZO [k] FLUO	0E+00	NA				
33	BIS (2-ETHYLHE	0E+00	NA				
34	CHRYSENE	0E+00	NA				
35	DIBENZ [a,h] A	0E+00	NA				
36	FLUORANTHENE	0E+00	NA				
37	FLUORENE	0E+00	NA				
38	INDENO [1,2,3-	0E+00	NA				
39	NAPHTHALENE	0E+00	NA				
40	PHENANTHRENE	0E+00	NA				
41	PHENOL	0E+00	NA				
42	PYRENE	0E+00	NA				

43	2,2-BIS (PARA-	1.0E-08	NA			2E-05	NA				
44	2,2-BIS (PARA-	3.9E-10	NA			NA	NA				
45	2,2-BIS (PARA-	3.2E-09	NA			NA	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	3.3E-10	NA			5E-06	NA				
48	BENZALDEHYDE	0.0E+00	NA			0E+00	NA				
49	BENZOIC ACID	0.0E+00	NA			0E+00	NA				
50	BETA-ENDOSULFA	6.3E-11	NA			1E-06	NA				
51	DIELDRIN	1.1E-11	NA			2E-07	NA				
52	GAMMA-CHLORDAN	2.7E-10	NA			4E-06	NA				
53	HEPTACHLOR	1.4E-11	NA			3E-08	NA				
54	HEPTACHLOR EPO	2.1E-11	NA			2E-06	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	3.5E-09	NA			7E-07	NA				
57	PCB 1260	1.0E-09	3.2E-08			NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	NA			0E+00	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			0E+00	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			0E+00	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			0E+00	NA				
				PATHWAY SUM (HI)		3E-05	0E+00	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL		3E-05					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP4
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-ADULT (B)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 PCB POLES SOIL ORAL (FROM WS1)	SCENARIO 2 PCB POLES SOIL DERMAL (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	NA				
3	BERYLLIUM	0.0E+00	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	0.0E+00	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	0.0E+00	NA				
14	ACETONE	0.0E+00	NA				
15	BENZENE	0.0E+00	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	0.0E+00	NA				
18	METHYLISOBUTYL	0.0E+00	NA				
19	TOLUENE	0.0E+00	NA				
20	XYLENES, TOTAL	0.0E+00	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	0.0E+00	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	0.0E+00	NA				
27	ANTHRACENE	0.0E+00	NA				
28	BENZO [a] ANTH	0.0E+00	NA				
29	BENZO [a] PYRE	0.0E+00	NA				
30	BENZO [b] FLUO	0.0E+00	NA				
31	BENZO [g,h,i]	0.0E+00	NA				
32	BENZO [k] FLUO	0.0E+00	NA				
33	BIS (2-ETHYLHE	0.0E+00	NA				
34	CHRYSENE	0.0E+00	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	0.0E+00	NA				
37	FLUORENE	0.0E+00	NA				
38	INDENO [1,2,3-	0.0E+00	NA				
39	NAPHTHALENE	0.0E+00	NA				
40	PHENANTHRENE	0.0E+00	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	0.0E+00	NA				

LIFETIME RISK SUMMARY

FUTURE
RES-ADULT (B)

LIFETIME EXCESS CANCER RISK

SCENARIO 1 PCB POLES SOIL ORAL (FROM WS1)	SCENARIO 2 PCB POLES SOIL DERMAL (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
NA	NA				
0E+00	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
NA	NA				
0E+00	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	4.5E-09	NA			2E-09	NA				
44	2,2-BIS (PARA-	1.7E-10	NA			6E-11	NA				
45	2,2-BIS (PARA-	1.4E-09	NA			3E-10	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	1.4E-10	NA			2E-10	NA				
48	BENZALDEHYDE	0.0E+00	NA			NA	NA				
49	BENZOIC ACID	0.0E+00	NA			NA	NA				
50	BETA-ENDOSULFA	2.7E-11	NA			NA	NA				
51	DIELDRIN	4.7E-12	NA			7E-11	NA				
52	GAMMA-CHLORDAN	1.2E-10	NA			2E-10	NA				
53	HEPTACHLOR	5.9E-12	NA			3E-11	NA				
54	HEPTACHLOR EPO	9.1E-12	NA			8E-11	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	1.5E-09	NA			NA	NA				
57	PCB 1260	4.5E-10	1.3E-08			3E-09	1E-07				
58	2,4,5-TRICHLOR	0.0E+00	NA			NA	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			NA	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			NA	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			NA	NA				
				TOTAL PATHWAY CANCER RISK		6E-09	1E-07	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL EXCESS RISK		1E-07					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP5
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
JOGGER

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 JOG-TRAIL (AIR-PART INHALATION (FROM WS1)	SCENARIO 2 JOG-TRAIL (AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.1E-07	9.6E-09				
3	BERYLLIUM	1.1E-09	1.6E-10				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	2.5E-08	1.8E-09				
7	MERCURY	0.0E+00	0.0E+00				
8	NICKEL	6.0E-09	4.4E-10				
9	NITRATE	0.0E+00	0.0E+00				
10	NITRITE	0.0E+00	0.0E+00				
11	SILVER	0.0E+00	0.0E+00				
12	THALLIUM	0.0E+00	0.0E+00				
13	VANADIUM	2.2E-08	1.8E-09				
14	ACETONE	9.7E-10	7.1E-11				
15	BENZENE	9.7E-10	7.1E-11				
16	CARBON DISULFI	0.0E+00	0.0E+00				
17	ETHYLBENZENE	9.7E-10	7.1E-11				
18	METHYLISOBUTYL	9.7E-10	7.1E-11				
19	TOLUENE	9.7E-10	7.1E-11				
20	XYLENES, TOTAL	9.7E-10	7.1E-11				
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00				
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00				
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00				
24	2-METHYLNAPHTH	2.7E-10	3.9E-11				
25	2-METHYLPHENOL	0.0E+00	0.0E+00				
26	ACENAPHTHENE	8.4E-10	3.9E-11				
27	ANTHRACENE	1.3E-09	3.9E-11				
28	BENZO [a] ANTH	2.7E-09	2.5E-10				
29	BENZO [a] PYRE	2.1E-09	1.0E-10				
30	BENZO [b] FLUO	2.3E-09	1.0E-10				
31	BENZO [g,h,i]	9.0E-10	4.8E-11				
32	BENZO [k] FLUO	1.8E-09	1.0E-10				
33	BIS (2-ETHYLHE	2.7E-10	3.9E-11				
34	CHRYSENE	2.7E-09	1.2E-10				
35	DIBENZ [a,h] A	0.0E+00	0.0E+00				
36	FLUORANTHENE	4.0E-09	2.2E-10				
37	FLUORENE	7.3E-10	3.9E-11				
38	INDENO [1,2,3-	1.1E-09	6.1E-11				
39	NAPHTHALENE	2.7E-10	3.9E-11				
40	PHENANTHRENE	3.3E-09	2.2E-10				
41	PHENOL	0.0E+00	0.0E+00				
42	PYRENE	3.7E-09	2.5E-10				

SUBCHRONIC RISK SUMMARY

CURRENT
JOGGER

SUBCHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 JOG-TRAIL (AIR-PART INHALATION (FROM WS1)	SCENARIO 2 JOG-TRAIL (AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	NA	NA	0E+00	0E+00	0E+00	0E+00
2	BARIUM	1E-04	1E-05				
3	BERYLLIUM	NA	NA				
4	CADMIUM (FOOD)	NA	NA				
5	CADMIUM (WATER	NA	NA				
6	CHROMIUM	4E-03	3E-04				
7	MERCURY	0E+00	0E+00				
8	NICKEL	NA	NA				
9	NITRATE	NA	NA				
10	NITRITE	NA	NA				
11	SILVER	NA	NA				
12	THALLIUM	NA	NA				
13	VANADIUM	NA	NA				
14	ACETONE	NA	NA				
15	BENZENE	NA	NA				
16	CARBON DISULFI	0E+00	0E+00				
17	ETHYLBENZENE	3E-09	2E-10				
18	METHYLISOBUTYL	5E-09	4E-10				
19	TOLUENE	2E-09	1E-10				
20	XYLENES, TOTAL	1E-08	8E-10				
21	1,2-DIMETHYLBE	0E+00	0E+00				
22	1,3-DIMETHYLBE	0E+00	0E+00				
23	2,4-DIMETHYLPH	NA	NA				
24	2-METHYLNAPHTH	NA	NA				
25	2-METHYLPHENOL	NA	NA				
26	ACENAPHTHENE	NA	NA				
27	ANTHRACENE	NA	NA				
28	BENZO [a] ANTH	NA	NA				
29	BENZO [a] PYRE	NA	NA				
30	BENZO [b] FLUO	NA	NA				
31	BENZO [g,h,i]	NA	NA				
32	BENZO [k] FLUO	NA	NA				
33	BIS (2-ETHYLHE	NA	NA				
34	CHRYSENE	NA	NA				
35	DIBENZ [a,h] A	NA	NA				
36	FLUORANTHENE	NA	NA				
37	FLUORENE	NA	NA				
38	INDENO [1,2,3-	NA	NA				
39	NAPHTHALENE	NA	NA				
40	PHENANTHRENE	NA	NA				
41	PHENOL	NA	NA				
42	PYRENE	NA	NA				

43	2,2-BIS (PARA-	1.4E-09	2.0E-10						NA	NA			
44	2,2-BIS (PARA-	1.4E-09	2.0E-10						NA	NA			
45	2,2-BIS (PARA-	1.4E-09	2.0E-10						NA	NA			
46	ALDRIN	0.0E+00	0.0E+00						NA	NA			
47	ALPHA CHLORDAN	0.0E+00	0.0E+00						NA	NA			
48	BENZALDEHYDE	0.0E+00	0.0E+00						NA	NA			
49	BENZOIC ACID	0.0E+00	0.0E+00						NA	NA			
50	BETA-ENDOSULFA	0.0E+00	0.0E+00						NA	NA			
51	DIELDRIN	1.4E-09	2.0E-10						NA	NA			
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00						NA	NA			
53	HEPTACHLOR	1.4E-09	2.0E-10						NA	NA			
54	HEPTACHLOR EPO	1.4E-09	2.0E-10						NA	NA			
55	LINDANE / GAMA	0.0E+00	0.0E+00						NA	NA			
56	METHOXYCHLOR	0.0E+00	0.0E+00						NA	NA			
57	PCB 1260	1.4E-09	2.0E-10						NA	NA			
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00						NA	NA			
59	2,4-DICHLOROPH	0.0E+00	0.0E+00						NA	NA			
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00						NA	NA			
61	TRICHLOROFLUOR	0.0E+00	0.0E+00						0E+00	0E+00			
	PATHWAY SUM (HI)								4E-03	3E-04	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL								4E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP5
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

CURRENT
JOGGER

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 JOG-TRAIL (AIR-PART INHALATION (FROM WS1)	SCENARIO 2 JOG-TRAIL (AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.1E-07	9.6E-09				
3	BERYLLIUM	1.1E-09	1.6E-10				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	2.5E-08	1.8E-09				
7	MERCURY	0.0E+00	0.0E+00				
8	NICKEL	6.0E-09	4.4E-10				
9	NITRATE	0.0E+00	0.0E+00				
10	NITRITE	0.0E+00	0.0E+00				
11	SILVER	0.0E+00	0.0E+00				
12	THALLIUM	0.0E+00	0.0E+00				
13	VANADIUM	2.2E-08	1.8E-09				
14	ACETONE	9.7E-10	7.1E-11				
15	BENZENE	9.7E-10	7.1E-11				
16	CARBON DISULFI	0.0E+00	0.0E+00				
17	ETHYLBENZENE	9.7E-10	7.1E-11				
18	METHYLISOBUTYL	9.7E-10	7.1E-11				
19	TOLUENE	9.7E-10	7.1E-11				
20	XYLENES, TOTAL	9.7E-10	7.1E-11				
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00				
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00				
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00				
24	2-METHYLNAPHTH	2.7E-10	3.9E-11				
25	2-METHYLPHENOL	0.0E+00	0.0E+00				
26	ACENAPHTHENE	8.4E-10	3.9E-11				
27	ANTHRACENE	1.3E-09	3.9E-11				
28	BENZO [a] ANTH	2.7E-09	2.5E-10				
29	BENZO [a] PYRE	2.1E-09	1.0E-10				
30	BENZO [b] FLUO	2.3E-09	1.0E-10				
31	BENZO [g,h,i]	9.0E-10	4.8E-11				
32	BENZO [k] FLUO	1.8E-09	1.0E-10				
33	BIS (2-ETHYLHE	2.7E-10	3.9E-11				
34	CHRYSENE	2.7E-09	1.2E-10				
35	DIBENZ [a,h] A	0.0E+00	0.0E+00				
36	FLUORANTHENE	4.0E-09	2.2E-10				
37	FLUORENE	7.3E-10	3.9E-11				
38	INDENO [1,2,3-	1.1E-09	6.1E-11				
39	NAPHTHALENE	2.7E-10	3.9E-11				
40	PHENANTHRENE	3.3E-09	2.2E-10				
41	PHENOL	0.0E+00	0.0E+00				
42	PYRENE	3.7E-09	2.5E-10				

CHRONIC RISK SUMMARY

CURRENT
JOGGER

CHRONIC HAZARD QUOTIENT

SCENARIO 1 JOG-TRAIL (AIR-PART INHALATION (FROM WS1)	SCENARIO 2 JOG-TRAIL (AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
NA	NA	0E+00	0E+00	0E+00	0E+00
1E-03	1E-04				
NA	NA				
NA	NA				
NA	NA				
4E-02	3E-03				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	0E+00				
3E-09	2E-10				
5E-08	4E-09				
2E-09	1E-10				
1E-08	8E-10				
0E+00	0E+00				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	1.4E-09	2.0E-10			NA	NA				
44	2,2-BIS (PARA-	1.4E-09	2.0E-10			NA	NA				
45	2,2-BIS (PARA-	1.4E-09	2.0E-10			NA	NA				
46	ALDRIN	0.0E+00	0.0E+00			NA	NA				
47	ALPHA CHLORDAN	0.0E+00	0.0E+00			NA	NA				
48	BENZALDEHYDE	0.0E+00	0.0E+00			NA	NA				
49	BENZOIC ACID	0.0E+00	0.0E+00			NA	NA				
50	BETA-ENDOSULFA	0.0E+00	0.0E+00			NA	NA				
51	DIELDRIN	1.4E-09	2.0E-10			NA	NA				
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00			NA	NA				
53	HEPTACHLOR	1.4E-09	2.0E-10			NA	NA				
54	HEPTACHLOR EPO	1.4E-09	2.0E-10			NA	NA				
55	LINDANE / GAMA	0.0E+00	0.0E+00			NA	NA				
56	METHOXYCHLOR	0.0E+00	0.0E+00			NA	NA				
57	PCB 1260	1.4E-09	2.0E-10			NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00			NA	NA				
59	2,4-DICHLOROPH	0.0E+00	0.0E+00			NA	NA				
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00			NA	NA				
61	TRICHLOROFLUOR	0.0E+00	0.0E+00			0E+00	0E+00				
				PATHWAY SUM (HI)		4E-02	3E-03	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL		4E-02					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 1
FILE NAME: POP5
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

CURRENT
JOGGER

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 JOG-TRAIL (AIR-PART INHALATION (FROM WS1)	SCENARIO 2 JOG-TRAIL (AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	4.5E-08	4.0E-09				
3	BERYLLIUM	4.7E-10	6.5E-11				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	1.1E-08	7.4E-10				
7	MERCURY	0.0E+00	0.0E+00				
8	NICKEL	2.5E-09	1.9E-10				
9	NITRATE	0.0E+00	0.0E+00				
10	NITRITE	0.0E+00	0.0E+00				
11	SILVER	0.0E+00	0.0E+00				
12	THALLIUM	0.0E+00	0.0E+00				
13	VANADIUM	9.4E-09	7.4E-10				
14	ACETONE	4.1E-10	3.0E-11				
15	BENZENE	4.1E-10	3.0E-11				
16	CARBON DISULFI	0.0E+00	0.0E+00				
17	ETHYLBENZENE	4.1E-10	3.0E-11				
18	METHYLISOBUTYL	4.1E-10	3.0E-11				
19	TOLUENE	4.1E-10	3.0E-11				
20	XYLENES, TOTAL	4.1E-10	3.0E-11				
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00				
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00				
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00				
24	2-METHYLNAPHTH	1.1E-10	1.6E-11				
25	2-METHYLPHENOL	0.0E+00	0.0E+00				
26	ACENAPHTHENE	3.5E-10	1.6E-11				
27	ANTHRACENE	5.2E-10	1.6E-11				
28	BENZO [a] ANTH	1.1E-09	1.1E-10				
29	BENZO [a] PYRE	8.8E-10	4.2E-11				
30	BENZO [b] FLUO	9.6E-10	4.2E-11				
31	BENZO [g,h,i]	3.8E-10	2.0E-11				
32	BENZO [k] FLUO	7.4E-10	4.2E-11				
33	BIS (2-ETHYLHE	1.1E-10	1.6E-11				
34	CHRYSENE	1.1E-09	5.2E-11				
35	DIBENZ [a,h] A	0.0E+00	0.0E+00				
36	FLUORANTHENE	1.7E-09	9.4E-11				
37	FLUORENE	3.1E-10	1.6E-11				
38	INDENO [1,2,3-	4.5E-10	2.5E-11				
39	NAPHTHALENE	1.1E-10	1.6E-11				
40	PHENANTHRENE	1.4E-09	9.4E-11				
41	PHENOL	0.0E+00	0.0E+00				
42	PYRENE	1.6E-09	1.1E-10				

LIFETIME RISK SUMMARY

CURRENT
JOGGER

LIFETIME EXCESS CANCER RISK

SCENARIO 1 JOG-TRAIL (AIR-PART INHALATION (FROM WS1)	SCENARIO 2 JOG-TRAIL (AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NA	NA				
4E-09	5E-10				
0E+00	0E+00				
0E+00	0E+00				
4E-07	3E-08				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
1E-11	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	5.7E-10	8.4E-11			2E-10	3E-11			
44	2,2-BIS (PARA-	5.7E-10	8.4E-11			NA	NA			
45	2,2-BIS (PARA-	5.7E-10	8.4E-11			NA	NA			
46	ALDRIN	0.0E+00	0.0E+00			0E+00	0E+00			
47	ALPHA CHLORDAN	0.0E+00	0.0E+00			0E+00	0E+00			
48	BENZALDEHYDE	0.0E+00	0.0E+00			NA	NA			
49	BENZOIC ACID	0.0E+00	0.0E+00			NA	NA			
50	BETA-ENDOSULFA	0.0E+00	0.0E+00			NA	NA			
51	DIELDRIN	5.7E-10	8.4E-11			9E-09	1E-09			
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00			0E+00	0E+00			
53	HEPTACHLOR	5.7E-10	8.4E-11			3E-09	4E-10			
54	HEPTACHLOR EPO	5.7E-10	8.4E-11			5E-09	8E-10			
55	LINDANE / GAMA	0.0E+00	0.0E+00			NA	NA			
56	METHOXYCHLOR	0.0E+00	0.0E+00			NA	NA			
57	PCB 1260	5.7E-10	8.4E-11			NA	NA			
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00			NA	NA			
59	2,4-DICHLOROPH	0.0E+00	0.0E+00			NA	NA			
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00			NA	NA			
61	TRICHLOROFLUOR	0.0E+00	0.0E+00			NA	NA			
				TOTAL PATHWAY CANCER RISK		4E-07	3E-08	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL EXCESS RISK		4E-07					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP2
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
GAS. WORKER

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 BLDG-23 AIR-VOC INHALATION (FROM WS1)	SCENARIO 2 BLDG-23 AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	2.1E-08				
3	BERYLLIUM	0.0E+00	3.4E-10				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	3.9E-09				
7	MERCURY	0.0E+00	0.0E+00				
8	NICKEL	0.0E+00	9.7E-10				
9	NITRATE	0.0E+00	0.0E+00				
10	NITRITE	0.0E+00	0.0E+00				
11	SILVER	0.0E+00	0.0E+00				
12	THALLIUM	0.0E+00	0.0E+00				
13	VANADIUM	0.0E+00	3.8E-09				
14	ACETONE	3.8E-16	1.5E-10				
15	BENZENE	2.7E-18	1.5E-10				
16	CARBON DISULFI	0.0E+00	0.0E+00				
17	ETHYLBENZENE	1.2E-19	1.5E-10				
18	METHYLISOBUTYL	5.0E-20	1.5E-10				
19	TOLUENE	5.0E-19	1.5E-10				
20	XYLENES, TOTAL	1.8E-18	1.5E-10				
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00				
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00				
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00				
24	2-METHYLNAPHTH	0.0E+00	8.5E-11				
25	2-METHYLPHENOL	0.0E+00	0.0E+00				
26	ACENAPHTHENE	0.0E+00	8.5E-11				
27	ANTHRACENE	0.0E+00	8.5E-11				
28	BENZO [a] ANTH	0.0E+00	5.5E-10				
29	BENZO [a] PYRE	0.0E+00	2.2E-10				
30	BENZO [b] FLUO	0.0E+00	2.2E-10				
31	BENZO [g,h,i]	0.0E+00	1.1E-10				
32	BENZO [k] FLUO	0.0E+00	2.2E-10				
33	BIS (2-ETHYLHE	0.0E+00	8.5E-11				
34	CHRYSENE	0.0E+00	2.7E-10				
35	DIBENZ [a,h] A	0.0E+00	0.0E+00				
36	FLUORANTHENE	0.0E+00	4.9E-10				
37	FLUORENE	0.0E+00	8.5E-11				
38	INDENO [1,2,3-	0.0E+00	1.3E-10				
39	NAPHTHALENE	4.6E-21	8.5E-11				
40	PHENANTHRENE	0.0E+00	4.9E-10				
41	PHENOL	0.0E+00	0.0E+00				
42	PYRENE	0.0E+00	5.5E-10				

SUBCHRONIC RISK SUMMARY

CURRENT
GAS. WORKER

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 BLDG-23 AIR-VOC INHALATION (FROM WS1)	SCENARIO 2 BLDG-23 AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
NA	NA	0E+00	0E+00	0E+00	0E+00
0E+00	2E-05				
NA	NA				
NA	NA				
NA	NA				
0E+00	7E-04				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	0E+00				
0E+00	5E-10				
0E+00	8E-10				
0E+00	3E-10				
0E+00	2E-09				
0E+00	0E+00				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	0.0E+00	4.4E-10				NA	NA			
44	2,2-BIS (PARA-	0.0E+00	4.4E-10				NA	NA			
45	2,2-BIS (PARA-	0.0E+00	4.4E-10				NA	NA			
46	ALDRIN	0.0E+00	0.0E+00				NA	NA			
47	ALPHA CHLORDAN	0.0E+00	0.0E+00				NA	NA			
48	BENZALDEHYDE	0.0E+00	0.0E+00				NA	NA			
49	BENZOIC ACID	0.0E+00	0.0E+00				NA	NA			
50	BETA-ENDOSULFA	0.0E+00	0.0E+00				NA	NA			
51	DIELDRIN	0.0E+00	4.4E-10				NA	NA			
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00				NA	NA			
53	HEPTACHLOR	0.0E+00	4.4E-10				NA	NA			
54	HEPTACHLOR EPO	0.0E+00	4.4E-10				NA	NA			
55	LINDANE / GAMA	0.0E+00	0.0E+00				NA	NA			
56	METHOXYCHLOR	0.0E+00	0.0E+00				NA	NA			
57	PCB 1260	0.0E+00	4.4E-10				NA	NA			
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00				NA	NA			
59	2,4-DICHLOROPH	0.0E+00	0.0E+00				NA	NA			
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00				NA	NA			
61	TRICHLOROFLUOR	0.0E+00	0.0E+00				0E+00	0E+00			
				PATHWAY SUM (HI)			0E+00	7E-04	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL			7E-04					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP2
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

CURRENT
GAS. WORKER

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 BLDG-23 AIR-VOC INHALATION (FROM WS1)	SCENARIO 2 BLDG-23 AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	2.1E-08				
3	BERYLLIUM	0.0E+00	3.4E-10				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	3.9E-09				
7	MERCURY	0.0E+00	0.0E+00				
8	NICKEL	0.0E+00	9.7E-10				
9	NITRATE	0.0E+00	0.0E+00				
10	NITRITE	0.0E+00	0.0E+00				
11	SILVER	0.0E+00	0.0E+00				
12	THALLIUM	0.0E+00	0.0E+00				
13	VANADIUM	0.0E+00	3.8E-09				
14	ACETONE	3.8E-16	1.5E-10				
15	BENZENE	2.7E-18	1.5E-10				
16	CARBON DISULFI	0.0E+00	0.0E+00				
17	ETHYLBENZENE	1.2E-19	1.5E-10				
18	METHYLISOBUTYL	5.0E-20	1.5E-10				
19	TOLUENE	5.0E-19	1.5E-10				
20	XYLENES, TOTAL	1.8E-18	1.5E-10				
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00				
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00				
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00				
24	2-METHYLNAPHTH	0.0E+00	8.5E-11				
25	2-METHYLPHENOL	0.0E+00	0.0E+00				
26	ACENAPHTHENE	0.0E+00	8.5E-11				
27	ANTHRACENE	0.0E+00	8.5E-11				
28	BENZO [a] ANTH	0.0E+00	5.5E-10				
29	BENZO [a] PYRE	0.0E+00	2.2E-10				
30	BENZO [b] FLUO	0.0E+00	2.2E-10				
31	BENZO [g,h,i]	0.0E+00	1.1E-10				
32	BENZO [k] FLUO	0.0E+00	2.2E-10				
33	BIS (2-ETHYLHE	0.0E+00	8.5E-11				
34	CHRYSENE	0.0E+00	2.7E-10				
35	DIBENZ [a,h] A	0.0E+00	0.0E+00				
36	FLUORANTHENE	0.0E+00	4.9E-10				
37	FLUORENE	0.0E+00	8.5E-11				
38	INDENO [1,2,3-	0.0E+00	1.3E-10				
39	NAPHTHALENE	4.6E-21	8.5E-11				
40	PHENANTHRENE	0.0E+00	4.9E-10				
41	PHENOL	0.0E+00	0.0E+00				
42	PYRENE	0.0E+00	5.5E-10				

CHRONIC RISK SUMMARY

CURRENT
GAS. WORKER

CHRONIC HAZARD QUOTIENT

SCENARIO 1 BLDG-23 AIR-VOC INHALATION (FROM WS1)	SCENARIO 2 BLDG-23 AIR-PART. INHALATION (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
NA	NA	0E+00	0E+00	0E+00	0E+00
0E+00	2E-04				
NA	NA				
NA	NA				
NA	NA				
0E+00	7E-03				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	0E+00				
0E+00	5E-10				
0E+00	8E-09				
0E+00	3E-10				
0E+00	2E-09				
0E+00	0E+00				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	0.0E+00	4.4E-10			NA	NA			
44	2,2-BIS (PARA-	0.0E+00	4.4E-10			NA	NA			
45	2,2-BIS (PARA-	0.0E+00	4.4E-10			NA	NA			
46	ALDRIN	0.0E+00	0.0E+00			NA	NA			
47	ALPHA_CHLORDAN	0.0E+00	0.0E+00			NA	NA			
48	BENZALDEHYDE	0.0E+00	0.0E+00			NA	NA			
49	BENZOIC ACID	0.0E+00	0.0E+00			NA	NA			
50	BETA-ENDOSULFA	0.0E+00	0.0E+00			NA	NA			
51	DIELDRIN	0.0E+00	4.4E-10			NA	NA			
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00			NA	NA			
53	HEPTACHLOR	0.0E+00	4.4E-10			NA	NA			
54	HEPTACHLOR EPO	0.0E+00	4.4E-10			NA	NA			
55	LINDANE / GAMA	0.0E+00	0.0E+00			NA	NA			
56	METHOXYCHLOR	0.0E+00	0.0E+00			NA	NA			
57	PCB 1260	0.0E+00	4.4E-10			NA	NA			
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00			NA	NA			
59	2,4-DICHLOROPH	0.0E+00	0.0E+00			NA	NA			
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00			NA	NA			
61	TRICHLOROFLUOR	0.0E+00	0.0E+00			0E+00	0E+00			
				PATHWAY SUM (HI)		0E+00	7E-03	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL		7E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP2
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

CURRENT
GAS. WORKER

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 BLDG-23 AIR-VOC INHALATION (FROM WS1)	SCENARIO 2 BLDG-23 AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 (FROM WS3)	SCENARIO 4 0 0 (FROM WS4)	SCENARIO 5 0 0 (FROM WS5)	SCENARIO 6 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	3.0E-09				
3	BERYLLIUM	0.0E+00	4.8E-11				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	5.5E-10				
7	MERCURY	0.0E+00	0.0E+00				
8	NICKEL	0.0E+00	1.4E-10				
9	NITRATE	0.0E+00	0.0E+00				
10	NITRITE	0.0E+00	0.0E+00				
11	SILVER	0.0E+00	0.0E+00				
12	THALLIUM	0.0E+00	0.0E+00				
13	VANADIUM	0.0E+00	5.4E-10				
14	ACETONE	5.4E-17	2.2E-11				
15	BENZENE	3.8E-19	2.2E-11				
16	CARBON DISULFI	0.0E+00	0.0E+00				
17	ETHYLBENZENE	1.7E-20	2.2E-11				
18	METHYLISOBUTYL	7.0E-21	2.2E-11				
19	TOLUENE	7.0E-20	2.2E-11				
20	XYLENES, TOTAL	2.5E-19	2.2E-11				
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00				
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00				
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00				
24	2-METHYLNAPHTH	0.0E+00	1.2E-11				
25	2-METHYLPHENOL	0.0E+00	0.0E+00				
26	ACENAPHTHENE	0.0E+00	1.2E-11				
27	ANTHRACENE	0.0E+00	1.2E-11				
28	BENZO [a] ANTH	0.0E+00	7.8E-11				
29	BENZO [a] PYRE	0.0E+00	3.1E-11				
30	BENZO [b] FLUO	0.0E+00	3.1E-11				
31	BENZO [g,h,i]	0.0E+00	1.5E-11				
32	BENZO [k] FLUO	0.0E+00	3.1E-11				
33	BIS (2-ETHYLHE	0.0E+00	1.2E-11				
34	CHRYSENE	0.0E+00	3.9E-11				
35	DIBENZ [a,h] A	0.0E+00	0.0E+00				
36	FLUORANTHENE	0.0E+00	7.0E-11				
37	FLUORENE	0.0E+00	1.2E-11				
38	INDENO [1,2,3-	0.0E+00	1.9E-11				
39	NAPHTHALENE	6.5E-22	1.2E-11				
40	PHENANTHRENE	0.0E+00	7.0E-11				
41	PHENOL	0.0E+00	0.0E+00				
42	PYRENE	0.0E+00	7.8E-11				

LIFETIME RISK SUMMARY

CURRENT
GAS. WORKER

LIFETIME EXCESS CANCER RISK

SCENARIO 1 BLDG-23 AIR-VOC INHALATION (FROM WS1)	SCENARIO 2 BLDG-23 AIR-PART INHALATION (FROM WS2)	SCENARIO 3 0 0 (FROM WS3)	SCENARIO 4 0 0 (FROM WS4)	SCENARIO 5 0 0 (FROM WS5)	SCENARIO 6 0 0 (FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NA	NA				
0E+00	4E-10				
0E+00	0E+00				
0E+00	0E+00				
0E+00	2E-08				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	0E+00				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	0.0E+00	6.2E-11			0E+00	2E-11				
44	2,2-BIS (PARA-	0.0E+00	6.2E-11			NA	NA				
45	2,2-BIS (PARA-	0.0E+00	6.2E-11			NA	NA				
46	ALDRIN	0.0E+00	0.0E+00			0E+00	0E+00				
47	ALPHA CHLORDAN	0.0E+00	0.0E+00			0E+00	0E+00				
48	BENZALDEHYDE	0.0E+00	0.0E+00			NA	NA				
49	BENZOIC ACID	0.0E+00	0.0E+00			NA	NA				
50	BETA-ENDOSULFA	0.0E+00	0.0E+00			NA	NA				
51	DIELDRIN	0.0E+00	6.2E-11			0E+00	1E-09				
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00			0E+00	0E+00				
53	HEPTACHLOR	0.0E+00	6.2E-11			0E+00	3E-10				
54	HEPTACHLOR EPO	0.0E+00	6.2E-11			0E+00	6E-10				
55	LINDANE / GAMA	0.0E+00	0.0E+00			NA	NA				
56	METHOXYCHLOR	0.0E+00	0.0E+00			NA	NA				
57	PCB 1260	0.0E+00	6.2E-11			NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00			NA	NA				
59	2,4-DICHLOROPH	0.0E+00	0.0E+00			NA	NA				
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00			NA	NA				
61	TRICHLOROFLUOR	0.0E+00	0.0E+00			NA	NA				
				TOTAL PATHWAY CANCER RISK		0E+00	2E-08	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL EXCESS RISK		2E-08					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP1
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
EXERCISER

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 (FROM WS1)	SCENARIO 2 (FROM WS2)	SCENARIO 3 (FROM WS3)	SCENARIO 4 (FROM WS4)	SCENARIO 5 (FROM WS5)	SCENARIO 6 (FROM WS6)
	BALL FIELD	0	0	0	0	0	0
	AIR-PART	0	0	0	0	0	0
	INHALATION	0	0	0	0	0	0
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.3E-07					
3	BERYLLIUM	1.4E-09					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	3.2E-08					
7	MERCURY	0.0E+00					
8	NICKEL	7.6E-09					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	2.8E-08					
14	ACETONE	1.2E-09					
15	BENZENE	1.2E-09					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	1.2E-09					
18	METHYLISOBUTYL	1.2E-09					
19	TOLUENE	1.2E-09					
20	XYLENES, TOTAL	1.2E-09					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	3.4E-10					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	1.1E-09					
27	ANTHRACENE	1.6E-09					
28	BENZO [a] ANTH	3.4E-09					
29	BENZO [a] PYRE	2.7E-09					
30	BENZO [b] FLUO	2.9E-09					
31	BENZO [g,h,i]	1.1E-09					
32	BENZO [k] FLUO	2.2E-09					
33	BIS (2-ETHYLHE	3.4E-10					
34	CHRYSENE	3.4E-09					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	5.1E-09					
37	FLUORENE	9.3E-10					
38	INDENO [1,2,3-	1.4E-09					
39	NAPHTHALENE	3.4E-10					
40	PHENANTHRENE	4.2E-09					
41	PHENOL	0.0E+00					
42	PYRENE	4.7E-09					

SUBCHRONIC RISK SUMMARY

CURRENT
EXERCISER

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 (FROM WS1)	SCENARIO 2 (FROM WS2)	SCENARIO 3 (FROM WS3)	SCENARIO 4 (FROM WS4)	SCENARIO 5 (FROM WS5)	SCENARIO 6 (FROM WS6)
BALL FIELD 0	0	0	0	0	0
AIR-PART 0	0	0	0	0	0
INHALATION 0	0	0	0	0	0
NA	0E+00	0E+00	0E+00	0E+00	0E+00
1E-04					
NA					
NA					
NA					
6E-03					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
4E-09					
6E-09					
2E-09					
1E-08					
0E+00					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	1.7E-09						NA			
44	2,2-BIS (PARA-	1.7E-09						NA			
45	2,2-BIS (PARA-	1.7E-09						NA			
46	ALDRIN	0.0E+00						NA			
47	ALPHA CHLORDAN	0.0E+00						NA			
48	BENZALDEHYDE	0.0E+00						NA			
49	BENZOIC ACID	0.0E+00						NA			
50	BETA-ENDOSULFA	0.0E+00						NA			
51	DIELDRIN	1.7E-09						NA			
52	GAMMA-CHLORDAN	0.0E+00						NA			
53	HEPTACHLOR	1.7E-09						NA			
54	HEPTACHLOR EPO	1.7E-09						NA			
55	LINDANE / GAMA	0.0E+00						NA			
56	METHOXYCHLOR	0.0E+00						NA			
57	PCB 1260	1.7E-09						NA			
58	2,4,5-TRICHLOR	0.0E+00						NA			
59	2,4-DICHLOROPH	0.0E+00						NA			
60	2-(2,4,5-TRICH	0.0E+00						NA			
61	TRICHLOROFLUOR	0.0E+00						0E+00			
	PATHWAY SUM (HI)							6E-03	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL							6E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP1
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY | CHRONIC RISK SUMMARY

CURRENT
EXERCISER

	CHRONIC DAILY INTAKE (mg/kg/day)						CHRONIC HAZARD QUOTIENT					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	BALL FIELD	0	0	0	0	0	BALL FIELD	0	0	0	0	0
	AIR-PART	0	0	0	0	0	AIR-PART	0	0	0	0	0
	INHALATION	0	0	0	0	0	INHALATION	0	0	0	0	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00
2 BARIUM	1.3E-07						1E-03					
3 BERYLLIUM	1.4E-09						NA					
4 CADMIUM (FOOD)	0.0E+00						NA					
5 CADMIUM (WATER	0.0E+00						NA					
6 CHROMIUM	3.2E-08						6E-02					
7 MERCURY	0.0E+00						0E+00					
8 NICKEL	7.6E-09						NA					
9 NITRATE	0.0E+00						NA					
10 NITRITE	0.0E+00						NA					
11 SILVER	0.0E+00						NA					
12 THALLIUM	0.0E+00						NA					
13 VANADIUM	2.8E-08						NA					
14 ACETONE	1.2E-09						NA					
15 BENZENE	1.2E-09						NA					
16 CARBON DISULFI	0.0E+00						0E+00					
17 ETHYLBENZENE	1.2E-09						4E-09					
18 METHYLISOBUTYL	1.2E-09						6E-08					
19 TOLUENE	1.2E-09						2E-09					
20 XYLENES, TOTAL	1.2E-09						1E-08					
21 1,2-DIMETHYLBE	0.0E+00						0E+00					
22 1,3-DIMETHYLBE	0.0E+00						0E+00					
23 2,4-DIMETHYLPH	0.0E+00						NA					
24 2-METHYLNAPHTH	3.4E-10						NA					
25 2-METHYLPHENOL	0.0E+00						NA					
26 ACENAPHTHENE	1.1E-09						NA					
27 ANTHRACENE	1.6E-09						NA					
28 BENZO [a] ANTH	3.4E-09						NA					
29 BENZO [a] PYRE	2.7E-09						NA					
30 BENZO [b] FLUO	2.9E-09						NA					
31 BENZO [g,h,i]	1.1E-09						NA					
32 BENZO [k] FLUO	2.2E-09						NA					
33 BIS (2-ETHYLHE	3.4E-10						NA					
34 CHRYSENE	3.4E-09						NA					
35 DIBENZ [a,h] A	0.0E+00						NA					
36 FLUORANTHENE	5.1E-09						NA					
37 FLUORENE	9.3E-10						NA					
38 INDENO [1,2,3-	1.4E-09						NA					
39 NAPHTHALENE	3.4E-10						NA					
40 PHENANTHRENE	4.2E-09						NA					
41 PHENOL	0.0E+00						NA					
42 PYRENE	4.7E-09						NA					

43	2,2-BIS (PARA-	1.7E-09						NA			
44	2,2-BIS (PARA-	1.7E-09						NA			
45	2,2-BIS (PARA-	1.7E-09						NA			
46	ALDRIN	0.0E+00						NA			
47	ALPHA CHLORDAN	0.0E+00						NA			
48	BENZALDEHYDE	0.0E+00						NA			
49	BENZOIC ACID	0.0E+00						NA			
50	BETA-ENDOSULFA	0.0E+00						NA			
51	DIELDRIN	1.7E-09						NA			
52	GAMMA-CHLORDAN	0.0E+00						NA			
53	HEPTACHLOR	1.7E-09						NA			
54	HEPTACHLOR EPO	1.7E-09						NA			
55	LINDANE / GAMA	0.0E+00						NA			
56	METHOXYCHLOR	0.0E+00						NA			
57	PCB 1260	1.7E-09						NA			
58	2,4,5-TRICHLOR	0.0E+00						NA			
59	2,4-DICHLOROPH	0.0E+00						NA			
60	2-(2,4,5-TRICH	0.0E+00						NA			
61	TRICHLOROFLUOR	0.0E+00						0E+00			
	PATHWAY SUM (HI)							6E-02	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL							6E-02					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP1
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY — CURRENT EXERCISER | LIFETIME RISK SUMMARY — CURRENT EXERCISER

		LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)						LIFETIME EXCESS CANCER RISK					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		BALL FIELD	0	0	0	0	0	BALL FIELD	0	0	0	0	0
		AIR-PART	0	0	0	0	0	AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0	INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	5.8E-08						NA					
3	BERYLLIUM	6.2E-10						5E-09					
4	CADMIUM (FOOD)	0.0E+00						0E+00					
5	CADMIUM (WATER	0.0E+00						0E+00					
6	CHROMIUM	1.4E-08						6E-07					
7	MERCURY	0.0E+00						NA					
8	NICKEL	3.3E-09						NA					
9	NITRATE	0.0E+00						NA					
10	NITRITE	0.0E+00						NA					
11	SILVER	0.0E+00						NA					
12	THALLIUM	0.0E+00						NA					
13	VANADIUM	1.2E-08						NA					
14	ACETONE	5.3E-10						NA					
15	BENZENE	5.3E-10						2E-11					
16	CARBON DISULFI	0.0E+00						NA					
17	ETHYLBENZENE	5.3E-10						NA					
18	METHYLISOBUTYL	5.3E-10						NA					
19	TOLUENE	5.3E-10						NA					
20	XYLENES, TOTAL	5.3E-10						NA					
21	1,2-DIMETHYLBE	0.0E+00						NA					
22	1,3-DIMETHYLBE	0.0E+00						NA					
23	2,4-DIMETHYLPH	0.0E+00						NA					
24	2-METHYLNAPHTH	1.5E-10						NA					
25	2-METHYLPHENOL	0.0E+00						NA					
26	ACENAPHTHENE	4.7E-10						NA					
27	ANTHRACENE	6.9E-10						NA					
28	BENZO [a] ANTH	1.5E-09						NA					
29	BENZO [a] PYRE	1.2E-09						NA					
30	BENZO [b] FLUO	1.3E-09						NA					
31	BENZO [g,h,i]	4.9E-10						NA					
32	BENZO [k] FLUO	9.7E-10						NA					
33	BIS (2-ETHYLHE	1.5E-10						NA					
34	CHRYSENE	1.5E-09						NA					
35	DIBENZ [a,h] A	0.0E+00						NA					
36	FLUORANTHENE	2.2E-09						NA					
37	FLUORENE	4.0E-10						NA					
38	INDENO [1,2,3-	5.9E-10						NA					
39	NAPHTHALENE	1.5E-10						NA					
40	PHENANTHRENE	1.8E-09						NA					
41	PHENOL	0.0E+00						NA					
42	PYRENE	2.1E-09						NA					

43	2,2-BIS (PARA-	7.5E-10	3E-10					
44	2,2-BIS (PARA-	7.5E-10	NA					
45	2,2-BIS (PARA-	7.5E-10	NA					
46	ALDRIN	0.0E+00	0E+00					
47	ALPHA CHLORDAN	0.0E+00	0E+00					
48	BENZALDEHYDE	0.0E+00	NA					
49	BENZOIC ACID	0.0E+00	NA					
50	BETA-ENDOSULFA	0.0E+00	NA					
51	DIELDRIN	7.5E-10	1E-08					
52	GAMMA-CHLORDAN	0.0E+00	0E+00					
53	HEPTACHLOR	7.5E-10	3E-09					
54	HEPTACHLOR EPO	7.5E-10	7E-09					
55	LINDANE / GAMA	0.0E+00	NA					
56	METHOXYCHLOR	0.0E+00	NA					
57	PCB 1260	7.5E-10	NA					
58	2,4,5-TRICHLOR	0.0E+00	NA					
59	2,4-DICHLOROPH	0.0E+00	NA					
60	2-(2,4,5-TRICH	0.0E+00	NA					
61	TRICHLOROFLUOR	0.0E+00	NA					
	TOTAL PATHWAY CANCER RISK		6E-07	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK		6E-07					

RANGE NAME: $SUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP3
LAST UPDATED: 06/04/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
MAINT. WORKER

	SUBCHRONIC DAILY INTAKE (mg/kg/day)					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	FENCELINE	FENCELINE	BLDG-30	BLDG-30	BLDG-30	0
	SOIL	SOIL	SOIL	SOIL	AIR-PART	0
	ORAL	DERMAL	ORAL	DERMAL	INHALATION	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0.0E+00	NA	0.0E+00	NA	0.0E+00	0.0E+00
2 BARIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
3 BERYLLIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
4 CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
5 CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
6 CHROMIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
7 MERCURY	0.0E+00	NA	0.0E+00	NA	0.0E+00	
8 NICKEL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
9 NITRATE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
10 NITRITE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
11 SILVER	0.0E+00	NA	0.0E+00	NA	0.0E+00	
12 THALLIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
13 VANADIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
14 ACETONE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
15 BENZENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
16 CARBON DISULFI	0.0E+00	NA	0.0E+00	NA	0.0E+00	
17 ETHYLBENZENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
18 METHYLISOBUTYL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
19 TOLUENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
20 XYLENES, TOTAL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
21 1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
22 1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
23 2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
24 2-METHYLNAPHTH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
25 2-METHYLPHENOL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
26 ACENAPHTHENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
27 ANTHRACENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
28 BENZO [a] ANTH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
29 BENZO [a] PYRE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
30 BENZO [b] FLUO	0.0E+00	NA	0.0E+00	NA	0.0E+00	
31 BENZO [g,h,i]	0.0E+00	NA	0.0E+00	NA	0.0E+00	
32 BENZO [k] FLUO	0.0E+00	NA	0.0E+00	NA	0.0E+00	
33 BIS (2-ETHYLHE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
34 CHRYSENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
35 DIBENZ [a,h] A	0.0E+00	NA	0.0E+00	NA	0.0E+00	
36 FLUORANTHENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
37 FLUORENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
38 INDENO [1,2,3-	0.0E+00	NA	0.0E+00	NA	0.0E+00	
39 NAPHTHALENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
40 PHENANTHRENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
41 PHENOL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
42 PYRENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	

SUBCHRONIC RISK SUMMARY

CURRENT
MAINT. WORKER

	SUBCHRONIC HAZARD QUOTIENT					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	FENCELINE	FENCELINE	BLDG-30	BLDG-30	BLDG-30	0
	SOIL	SOIL	SOIL	SOIL	AIR-PART	0
	ORAL	DERMAL	ORAL	DERMAL	INHALATION	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0E+00	NA	0E+00	NA	NA	0E+00
2 BARIUM	0E+00	NA	0E+00	NA	0E+00	
3 BERYLLIUM	0E+00	NA	0E+00	NA	NA	
4 CADMIUM (FOOD)	NA	NA	NA	NA	NA	
5 CADMIUM (WATER	NA	NA	NA	NA	NA	
6 CHROMIUM	0E+00	NA	0E+00	NA	0E+00	
7 MERCURY	0E+00	NA	0E+00	NA	0E+00	
8 NICKEL	0E+00	NA	0E+00	NA	NA	
9 NITRATE	NA	NA	NA	NA	NA	
10 NITRITE	NA	NA	NA	NA	NA	
11 SILVER	0E+00	NA	0E+00	NA	NA	
12 THALLIUM	0E+00	NA	0E+00	NA	NA	
13 VANADIUM	0E+00	NA	0E+00	NA	NA	
14 ACETONE	0E+00	NA	0E+00	NA	NA	
15 BENZENE	NA	NA	NA	NA	NA	
16 CARBON DISULFI	0E+00	NA	0E+00	NA	0E+00	
17 ETHYLBENZENE	0E+00	NA	0E+00	NA	0E+00	
18 METHYLISOBUTYL	0E+00	NA	0E+00	NA	0E+00	
19 TOLUENE	0E+00	NA	0E+00	NA	0E+00	
20 XYLENES, TOTAL	0E+00	NA	0E+00	NA	0E+00	
21 1,2-DIMETHYLBE	0E+00	NA	0E+00	NA	0E+00	
22 1,3-DIMETHYLBE	0E+00	NA	0E+00	NA	0E+00	
23 2,4-DIMETHYLPH	0E+00	NA	0E+00	NA	NA	
24 2-METHYLNAPHTH	0E+00	NA	0E+00	NA	NA	
25 2-METHYLPHENOL	NA	NA	NA	NA	NA	
26 ACENAPHTHENE	0E+00	NA	0E+00	NA	NA	
27 ANTHRACENE	0E+00	NA	0E+00	NA	NA	
28 BENZO [a] ANTH	0E+00	NA	0E+00	NA	NA	
29 BENZO [a] PYRE	0E+00	NA	0E+00	NA	NA	
30 BENZO [b] FLUO	0E+00	NA	0E+00	NA	NA	
31 BENZO [g,h,i]	0E+00	NA	0E+00	NA	NA	
32 BENZO [k] FLUO	0E+00	NA	0E+00	NA	NA	
33 BIS (2-ETHYLHE	0E+00	NA	0E+00	NA	NA	
34 CHRYSENE	0E+00	NA	0E+00	NA	NA	
35 DIBENZ [a,h] A	0E+00	NA	0E+00	NA	NA	
36 FLUORANTHENE	0E+00	NA	0E+00	NA	NA	
37 FLUORENE	0E+00	NA	0E+00	NA	NA	
38 INDENO [1,2,3-	0E+00	NA	0E+00	NA	NA	
39 NAPHTHALENE	0E+00	NA	0E+00	NA	NA	
40 PHENANTHRENE	0E+00	NA	0E+00	NA	NA	
41 PHENOL	0E+00	NA	0E+00	NA	NA	
42 PYRENE	0E+00	NA	0E+00	NA	NA	

43 2,2-BIS (PARA-	5.4E-09	NA	5.8E-07	NA	2.1E-10	1E-05	NA	1E-03	NA	NA	
44 2,2-BIS (PARA-	1.4E-09	NA	1.1E-07	NA	3.9E-11	NA	NA	NA	NA	NA	
45 2,2-BIS (PARA-	2.7E-09	NA	1.8E-07	NA	6.7E-11	NA	NA	NA	NA	NA	
46 ALDRIN	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA	
47 ALPHA CHLORDAN	2.3E-09	NA	6.2E-09	NA	2.3E-12	4E-05	NA	1E-04	NA	NA	
48 BENZALDEHYDE	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA	
49 BENZOIC ACID	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA	
50 BETA-ENDOSULFA	0.0E+00	NA	1.1E-08	NA	4.0E-12	0E+00	NA	5E-05	NA	NA	
51 DIELDRIN	9.7E-10	NA	2.0E-09	NA	7.4E-13	2E-05	NA	4E-05	NA	NA	
52 GAMMA-CHLORDAN	2.6E-09	NA	6.7E-09	NA	2.5E-12	4E-05	NA	1E-04	NA	NA	
53 HEPTACHLOR	1.2E-09	NA	4.7E-10	NA	1.7E-13	2E-06	NA	9E-07	NA	NA	
54 HEPTACHLOR EPO	4.9E-10	NA	1.4E-09	NA	5.1E-13	NA	NA	NA	NA	NA	
55 LINDANE / GAMA	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA	
56 METHOXYCHLOR	0.0E+00	NA	3.1E-08	NA	1.1E-11	0E+00	NA	6E-06	NA	NA	
57 PCB 1260	1.2E-08	7.5E-08	1.1E-08	6.6E-08	4.0E-12	NA	NA	NA	NA	NA	
58 2,4,5-TRICHLOR	2.5E-09	NA	0.0E+00	NA	0.0E+00	2E-08	NA	0E+00	NA	NA	
59 2,4-DICHLOROPH	9.3E-09	NA	0.0E+00	NA	0.0E+00	9E-07	NA	0E+00	NA	NA	
60 2-(2,4,5-TRICH	2.5E-09	NA	0.0E+00	NA	0.0E+00	3E-07	NA	0E+00	NA	NA	
61 TRICHLOROFLUOR	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	0E+00	
					PATHWAY SUM (HI)	1E-04	0E+00	1E-03	0E+00	0E+00	0E+00
					POPULATION TOTAL	1E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP3
LAST UPDATED: 06/04/92

CHRONIC EXPOSURE SUMMARY

CURRENT
MAINT. WORKER

	CHRONIC DAILY INTAKE (mg/kg/day)					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	FENCELINE	FENCELINE	BLDG-30	BLDG-30	BLDG-30	0
	SOIL	SOIL	SOIL	SOIL	AIR-PART	0
	ORAL	DERMAL	ORAL	DERMAL	INHALATION	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0.0E+00	NA	0.0E+00	NA	0.0E+00	0.0E+00
2 BARIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
3 BERYLLIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
4 CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
5 CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
6 CHROMIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
7 MERCURY	0.0E+00	NA	0.0E+00	NA	0.0E+00	
8 NICKEL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
9 NITRATE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
10 NITRITE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
11 SILVER	0.0E+00	NA	0.0E+00	NA	0.0E+00	
12 THALLIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
13 VANADIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
14 ACETONE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
15 BENZENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
16 CARBON DISULFI	0.0E+00	NA	0.0E+00	NA	0.0E+00	
17 ETHYLBENZENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
18 METHYLISOBUTYL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
19 TOLUENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
20 XYLENES, TOTAL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
21 1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
22 1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
23 2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
24 2-METHYLNAPHTH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
25 2-METHYLPHENOL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
26 ACENAPHTHENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
27 ANTHRACENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
28 BENZO [a] ANTH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
29 BENZO [a] PYRE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
30 BENZO [b] FLUO	0.0E+00	NA	0.0E+00	NA	0.0E+00	
31 BENZO [g,h,i]	0.0E+00	NA	0.0E+00	NA	0.0E+00	
32 BENZO [k] FLUO	0.0E+00	NA	0.0E+00	NA	0.0E+00	
33 BIS (2-ETHYLHE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
34 CHRYSENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
35 DIBENZ [a,h] A	0.0E+00	NA	0.0E+00	NA	0.0E+00	
36 FLUORANTHENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
37 FLUORENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
38 INDENO [1,2,3-	0.0E+00	NA	0.0E+00	NA	0.0E+00	
39 NAPHTHALENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
40 PHENANTHRENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
41 PHENOL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
42 PYRENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	

CHRONIC RISK SUMMARY

CURRENT
MAINT. WORKER

	CHRONIC HAZARD QUOTIENT					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	FENCELINE	FENCELINE	BLDG-30	BLDG-30	BLDG-30	0
	SOIL	SOIL	SOIL	SOIL	AIR-PART	0
	ORAL	DERMAL	ORAL	DERMAL	INHALATION	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0E+00	NA	0E+00	NA	NA	0E+00
2 BARIUM	0E+00	NA	0E+00	NA	0E+00	
3 BERYLLIUM	0E+00	NA	0E+00	NA	NA	
4 CADMIUM (FOOD)	0E+00	0E+00	0E+00	0E+00	NA	
5 CADMIUM (WATER	0E+00	0E+00	0E+00	0E+00	NA	
6 CHROMIUM	0E+00	NA	0E+00	NA	0E+00	
7 MERCURY	0E+00	NA	0E+00	NA	0E+00	
8 NICKEL	0E+00	NA	0E+00	NA	NA	
9 NITRATE	0E+00	NA	0E+00	NA	NA	
10 NITRITE	0E+00	NA	0E+00	NA	NA	
11 SILVER	0E+00	NA	0E+00	NA	NA	
12 THALLIUM	0E+00	NA	0E+00	NA	NA	
13 VANADIUM	0E+00	NA	0E+00	NA	NA	
14 ACETONE	0E+00	NA	0E+00	NA	NA	
15 BENZENE	NA	NA	NA	NA	NA	
16 CARBON DISULFI	0E+00	NA	0E+00	NA	0E+00	
17 ETHYLBENZENE	0E+00	NA	0E+00	NA	0E+00	
18 METHYLISOBUTYL	0E+00	NA	0E+00	NA	0E+00	
19 TOLUENE	0E+00	NA	0E+00	NA	0E+00	
20 XYLENES, TOTAL	0E+00	NA	0E+00	NA	0E+00	
21 1,2-DIMETHYLBE	0E+00	NA	0E+00	NA	0E+00	
22 1,3-DIMETHYLBE	0E+00	NA	0E+00	NA	0E+00	
23 2,4-DIMETHYLPH	0E+00	NA	0E+00	NA	NA	
24 2-METHYLNAPHTH	0E+00	NA	0E+00	NA	NA	
25 2-METHYLPHENOL	0E+00	NA	0E+00	NA	NA	
26 ACENAPHTHENE	0E+00	NA	0E+00	NA	NA	
27 ANTHRACENE	0E+00	NA	0E+00	NA	NA	
28 BENZO [a] ANTH	0E+00	NA	0E+00	NA	NA	
29 BENZO [a] PYRE	0E+00	NA	0E+00	NA	NA	
30 BENZO [b] FLUO	0E+00	NA	0E+00	NA	NA	
31 BENZO [g,h,i]	0E+00	NA	0E+00	NA	NA	
32 BENZO [k] FLUO	0E+00	NA	0E+00	NA	NA	
33 BIS (2-ETHYLHE	0E+00	NA	0E+00	NA	NA	
34 CHRYSENE	0E+00	NA	0E+00	NA	NA	
35 DIBENZ [a,h] A	0E+00	NA	0E+00	NA	NA	
36 FLUORANTHENE	0E+00	NA	0E+00	NA	NA	
37 FLUORENE	0E+00	NA	0E+00	NA	NA	
38 INDENO [1,2,3-	0E+00	NA	0E+00	NA	NA	
39 NAPHTHALENE	0E+00	NA	0E+00	NA	NA	
40 PHENANTHRENE	0E+00	NA	0E+00	NA	NA	
41 PHENOL	0E+00	NA	0E+00	NA	NA	
42 PYRENE	0E+00	NA	0E+00	NA	NA	

43	2,2-BIS (PARA-	5.4E-09	NA	5.8E-07	NA	2.1E-10	1E-05	NA	1E-03	NA	NA
44	2,2-BIS (PARA-	1.4E-09	NA	1.1E-07	NA	3.9E-11	NA	NA	NA	NA	NA
45	2,2-BIS (PARA-	2.7E-09	NA	1.8E-07	NA	6.7E-11	NA	NA	NA	NA	NA
46	ALDRIN	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA
47	ALPHA CHLORDAN	2.3E-09	NA	6.2E-09	NA	2.3E-12	4E-05	NA	1E-04	NA	NA
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA
49	BENZOIC-ACID	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA
50	BETA-ENDOSULFA	0.0E+00	NA	1.1E-08	NA	4.0E-12	0E+00	NA	2E-04	NA	NA
51	DIELDRIN	9.7E-10	NA	2.0E-09	NA	7.4E-13	2E-05	NA	4E-05	NA	NA
52	GAMMA-CHLORDAN	2.6E-09	NA	6.7E-09	NA	2.5E-12	4E-05	NA	1E-04	NA	NA
53	HEPTACHLOR	1.2E-09	NA	4.7E-10	NA	1.7E-13	2E-06	NA	9E-07	NA	NA
54	HEPTACHLOR EPO	4.9E-10	NA	1.4E-09	NA	5.1E-13	4E-05	NA	1E-04	NA	NA
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA
56	METHOXYCHLOR	0.0E+00	NA	3.1E-08	NA	1.1E-11	0E+00	NA	6E-06	NA	NA
57	PCB 1260	1.2E-08	7.5E-08	1.1E-08	6.6E-08	4.0E-12	NA	NA	NA	NA	NA
58	2,4,5-TRICHLOR	2.5E-09	NA	0.0E+00	NA	0.0E+00	2E-07	NA	0E+00	NA	NA
59	2,4-DICHLOROPH	9.3E-09	NA	0.0E+00	NA	0.0E+00	9E-07	NA	0E+00	NA	NA
60	2-(2,4,5-TRICH	2.5E-09	NA	0.0E+00	NA	0.0E+00	3E-07	NA	0E+00	NA	NA
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	0E+00
						PATHWAY SUM (HI)	2E-04	0E+00	2E-03	0E+00	0E+00	0E+00
						POPULATION TOTAL	2E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 2
FILE NAME: POP3
LAST UPDATED: 06/04/92

LIFETIME EXPOSURE SUMMARY

CURRENT
MAINT. WORKER

	LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	FENCELINE	FENCELINE	BLDG-30	BLDG-30	BLDG-30	0
	SOIL	SOIL	SOIL	SOIL	AIR-PART	0
	ORAL	DERMAL	ORAL	DERMAL	INHALATION	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0.0E+00	NA	0.0E+00	NA	0.0E+00	0.0E+00
2 BARIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
3 BERYLLIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
4 CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
5 CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	
6 CHROMIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
7 MERCURY	0.0E+00	NA	0.0E+00	NA	0.0E+00	
8 NICKEL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
9 NITRATE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
10 NITRITE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
11 SILVER	0.0E+00	NA	0.0E+00	NA	0.0E+00	
12 THALLIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
13 VANADIUM	0.0E+00	NA	0.0E+00	NA	0.0E+00	
14 ACETONE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
15 BENZENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
16 CARBON DISULFI	0.0E+00	NA	0.0E+00	NA	0.0E+00	
17 ETHYLBENZENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
18 METHYLISOBUTYL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
19 TOLUENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
20 XYLENES, TOTAL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
21 1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
22 1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
23 2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
24 2-METHYLNAPHTH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
25 2-METHYLPHENOL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
26 ACENAPHTHENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
27 ANTHRACENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
28 BENZO [a] ANTH	0.0E+00	NA	0.0E+00	NA	0.0E+00	
29 BENZO [a] PYRE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
30 BENZO [b] FLUO	0.0E+00	NA	0.0E+00	NA	0.0E+00	
31 BENZO [g,h,i]	0.0E+00	NA	0.0E+00	NA	0.0E+00	
32 BENZO [k] FLUO	0.0E+00	NA	0.0E+00	NA	0.0E+00	
33 BIS (2-ETHYLHE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
34 CHRYSENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
35 DIBENZ [a,h] A	0.0E+00	NA	0.0E+00	NA	0.0E+00	
36 FLUORANTHENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
37 FLUORENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
38 INDENO [1,2,3-	0.0E+00	NA	0.0E+00	NA	0.0E+00	
39 NAPHTHALENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
40 PHENANTHRENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	
41 PHENOL	0.0E+00	NA	0.0E+00	NA	0.0E+00	
42 PYRENE	0.0E+00	NA	0.0E+00	NA	0.0E+00	

LIFETIME RISK SUMMARY

CURRENT
MAINT. WORKER

	LIFETIME EXCESS CANCER RISK					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	FENCELINE	FENCELINE	BLDG-30	BLDG-30	BLDG-30	0
	SOIL	SOIL	SOIL	SOIL	AIR-PART	0
	ORAL	DERMAL	ORAL	DERMAL	INHALATION	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0E+00	NA	0E+00	NA	0E+00	0E+00
2 BARIUM	NA	NA	NA	NA	NA	
3 BERYLLIUM	0E+00	NA	0E+00	NA	0E+00	
4 CADMIUM (FOOD)	NA	NA	NA	NA	0E+00	
5 CADMIUM (WATER	NA	NA	NA	NA	0E+00	
6 CHROMIUM	NA	NA	NA	NA	0E+00	
7 MERCURY	NA	NA	NA	NA	NA	
8 NICKEL	NA	NA	NA	NA	NA	
9 NITRATE	NA	NA	NA	NA	NA	
10 NITRITE	NA	NA	NA	NA	NA	
11 SILVER	NA	NA	NA	NA	NA	
12 THALLIUM	NA	NA	NA	NA	NA	
13 VANADIUM	NA	NA	NA	NA	NA	
14 ACETONE	NA	NA	NA	NA	NA	
15 BENZENE	0E+00	NA	0E+00	NA	0E+00	
16 CARBON DISULFI	NA	NA	NA	NA	NA	
17 ETHYLBENZENE	NA	NA	NA	NA	NA	
18 METHYLISOBUTYL	NA	NA	NA	NA	NA	
19 TOLUENE	NA	NA	NA	NA	NA	
20 XYLENES, TOTAL	NA	NA	NA	NA	NA	
21 1,2-DIMETHYLBE	NA	NA	NA	NA	NA	
22 1,3-DIMETHYLBE	NA	NA	NA	NA	NA	
23 2,4-DIMETHYLPH	NA	NA	NA	NA	NA	
24 2-METHYLNAPHTH	NA	NA	NA	NA	NA	
25 2-METHYLPHENOL	NA	NA	NA	NA	NA	
26 ACENAPHTHENE	NA	NA	NA	NA	NA	
27 ANTHRACENE	NA	NA	NA	NA	NA	
28 BENZO [a] ANTH	0E+00	NA	0E+00	NA	NA	
29 BENZO [a] PYRE	0E+00	NA	0E+00	NA	NA	
30 BENZO [b] FLUO	0E+00	NA	0E+00	NA	NA	
31 BENZO [g,h,i]	NA	NA	NA	NA	NA	
32 BENZO [k] FLUO	0E+00	NA	0E+00	NA	NA	
33 BIS (2-ETHYLHE	0E+00	NA	0E+00	NA	NA	
34 CHRYSENE	0E+00	NA	0E+00	NA	NA	
35 DIBENZ [a,h] A	0E+00	NA	0E+00	NA	NA	
36 FLUORANTHENE	NA	NA	NA	NA	NA	
37 FLUORENE	NA	NA	NA	NA	NA	
38 INDENO [1,2,3-	0E+00	NA	0E+00	NA	NA	
39 NAPHTHALENE	NA	NA	NA	NA	NA	
40 PHENANTHRENE	NA	NA	NA	NA	NA	
41 PHENOL	NA	NA	NA	NA	NA	
42 PYRENE	NA	NA	NA	NA	NA	

43 2,2-BIS (PARA-	7.7E-10	NA	8.1E-08	NA	2.9E-11	3E-10	NA	3E-08	NA	1E-11	
44 2,2-BIS (PARA-	2.0E-10	NA	1.5E-08	NA	5.4E-12	7E-11	NA	5E-09	NA	NA	
45 2,2-BIS (PARA-	3.8E-10	NA	2.6E-08	NA	9.3E-12	9E-11	NA	6E-09	NA	NA	
46 ALDRIN	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	0E+00	
47 ALPHA CHLORDAN	3.2E-10	NA	8.7E-10	NA	3.1E-13	4E-10	NA	1E-09	NA	0E+00	
48 BENZALDEHYDE	0.0E+00	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	
49 BENZOIC ACID	0.0E+00	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	
50 BETA-ENDOSULFA	0.0E+00	NA	1.5E-09	NA	5.5E-13	NA	NA	NA	NA	NA	
51 DIELDRIN	1.4E-10	NA	2.9E-10	NA	1.0E-13	2E-09	NA	5E-09	NA	2E-12	
52 GAMMA-CHLORDAN	3.7E-10	NA	9.5E-10	NA	3.4E-13	5E-10	NA	1E-09	NA	0E+00	
53 HEPTACHLOR	1.7E-10	NA	6.6E-11	NA	2.4E-14	8E-10	NA	3E-10	NA	0E+00	
54 HEPTACHLOR EPO	6.9E-11	NA	2.0E-10	NA	7.1E-14	6E-10	NA	2E-09	NA	0E+00	
55 LINDANE / GAMA	0.0E+00	NA	0.0E+00	NA	0.0E+00	0E+00	NA	0E+00	NA	NA	
56 METHOXYCHLOR	0.0E+00	NA	4.4E-09	NA	1.6E-12	NA	NA	NA	NA	NA	
57 PCB 1260	1.8E-09	1.1E-08	1.5E-09	9.2E-09	5.5E-13	1E-08	8E-08	1E-08	7E-08	NA	
58 2,4,5-TRICHLOR	3.5E-10	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	
59 2,4-DICHLOROPH	1.3E-09	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	
60 2-(2,4,5-TRICH	3.6E-10	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	
61 TRICHLOROFLUOR	0.0E+00	NA	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	
					TOTAL PATHWAY CANCER RISK	1E-08	8E-08	6E-08	7E-08	1E-11	0E+00
					POPULATION TOTAL EXCESS RISK	2E-07					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP1
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
CHILD (CL)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	5.4E-08	4.8E-09	4.5E-07	NA
2	BARIUM	5.8E-10	0.0E+00	5.3E-07	4.7E-08	2.5E-06	NA
3	BERYLLIUM	9.3E-12	0.0E+00	0.0E+00	0.0E+00	2.2E-07	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-08	8.0E-09
5	CADMIUM (WATER	0.0E+00	0.0E+00	8.0E-08	7.1E-09	0.0E+00	0.0E+00
6	CHROMIUM	1.1E-10	0.0E+00	1.4E-07	1.2E-08	1.7E-06	NA
7	MERCURY	0.0E+00	0.0E+00	6.7E-09	5.9E-10	1.6E-09	NA
8	NICKEL	2.6E-11	0.0E+00	5.7E-07	5.0E-08	2.9E-07	NA
9	NITRATE	0.0E+00	0.0E+00	8.7E-06	7.7E-07	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	9.9E-08	8.8E-09	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	8.8E-09	7.8E-10	1.9E-08	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	1.1E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
14	ACETONE	4.2E-12	8.9E-18	9.0E-08	4.6E-09	2.2E-08	NA
15	BENZENE	4.2E-12	6.2E-20	0.0E+00	0.0E+00	0.0E+00	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	4.2E-12	2.9E-21	0.0E+00	0.0E+00	0.0E+00	NA
18	METHYLISOBUTYL	4.2E-12	1.1E-21	0.0E+00	0.0E+00	0.0E+00	NA
19	TOLUENE	4.2E-12	1.1E-20	0.0E+00	0.0E+00	0.0E+00	NA
20	XYLENES, TOTAL	4.2E-12	4.1E-20	0.0E+00	0.0E+00	0.0E+00	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.3E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.1E-08	NA
27	ANTHRACENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.4E-08	NA
28	BENZO [a] ANTH	1.5E-11	0.0E+00	0.0E+00	0.0E+00	3.1E-08	NA
29	BENZO [a] PYRE	6.0E-12	0.0E+00	0.0E+00	0.0E+00	2.6E-08	NA
30	BENZO [b] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.4E-08	NA
31	BENZO [g,h,i]	2.9E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.2E-08	NA
33	BIS (2-ETHYLHE	2.3E-12	0.0E+00	1.5E-07	4.5E-07	3.8E-08	NA
34	CHRYSENE	7.5E-12	0.0E+00	0.0E+00	0.0E+00	3.7E-08	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	6.8E-08	NA
37	FLUORENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
38	INDENO [1,2,3-	3.6E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
39	NAPHTHALENE	2.3E-12	1.1E-22	0.0E+00	0.0E+00	0.0E+00	NA
40	PHENANTHRENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	5.6E-08	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.5E-11	0.0E+00	0.0E+00	0.0E+00	6.7E-08	NA

SUBCHRONIC RISK SUMMARY

CURRENT
CHILD (CL)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
NA	NA	2E-04	2E-05	2E-03	NA
6E-07	0E+00	8E-06	7E-06	4E-05	NA
NA	NA	0E+00	0E+00	4E-05	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
2E-05	0E+00	7E-06	1E-05	9E-05	NA
0E+00	0E+00	2E-05	1E-05	5E-06	NA
NA	NA	3E-05	5E-05	1E-05	NA
NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA
NA	NA	2E-06	5E-07	4E-06	NA
NA	NA	0E+00	0E+00	0E+00	NA
NA	NA	0E+00	0E+00	0E+00	NA
NA	NA	9E-08	5E-09	2E-08	NA
NA	NA	NA	NA	NA	NA
0E+00	0E+00	0E+00	0E+00	0E+00	NA
1E-11	0E+00	0E+00	0E+00	0E+00	NA
2E-11	0E+00	0E+00	0E+00	0E+00	NA
7E-12	0E+00	0E+00	0E+00	0E+00	NA
5E-11	0E+00	0E+00	0E+00	0E+00	NA
0E+00	0E+00	0E+00	0E+00	0E+00	NA
0E+00	0E+00	0E+00	0E+00	0E+00	NA
NA	NA	0E+00	0E+00	0E+00	NA
NA	NA	0E+00	NA	0E+00	NA
NA	NA	NA	NA	NA	NA
NA	NA	0E+00	NA	2E-08	NA
NA	NA	0E+00	NA	5E-09	NA
NA	NA	0E+00	NA	1E-07	NA
NA	NA	0E+00	NA	9E-08	NA
NA	NA	0E+00	NA	1E-07	NA
NA	NA	0E+00	NA	0E+00	NA
NA	NA	0E+00	NA	1E-07	NA
NA	NA	8E-06	2E-05	2E-06	NA
NA	NA	0E+00	NA	1E-07	NA
NA	NA	0E+00	NA	0E+00	NA
NA	NA	0E+00	NA	2E-07	NA
NA	NA	0E+00	NA	3E-08	NA
NA	NA	0E+00	NA	4E-08	NA
NA	NA	0E+00	NA	0E+00	NA
NA	NA	0E+00	NA	2E-07	NA
NA	NA	0E+00	0E+00	0E+00	NA
NA	NA	0E+00	NA	2E-07	NA

43	2,2-BIS (PARA-	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
44	2,2-BIS (PARA-	1.2E-11	0.0E+00	7.6E-10	1.9E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
45	2,2-BIS (PARA-	1.2E-11	0.0E+00	8.5E-10	1.8E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	1.8E-10	1.4E-07	0.0E+00	NA	NA	NA	3E-06	2E-03	0E+00	NA
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
49	BENZOIC ACID	0.0E+00	0.0E+00	3.2E-07	2.1E-07	1.3E-08	NA	NA	NA	8E-08	5E-08	3E-09	NA
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
51	DIELDRIN	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	4.1E-10	3.5E-09	0.0E+00	NA	NA	NA	7E-06	6E-05	0E+00	NA
53	HEPTACHLOR	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
54	HEPTACHLOR EPO	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
57	PCB 1260	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
							PATHWAY SUM (HI)	2E-05	0E+00	3E-04	2E-03	2E-03	0E+00
							POPULATION TOTAL	4E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP1
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

CURRENT
CHILD (CL)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	5.4E-08	4.8E-09	4.5E-07	NA
2	BARIUM	5.8E-10	0.0E+00	5.3E-07	4.7E-08	2.5E-06	NA
3	BERYLLIUM	9.3E-12	0.0E+00	0.0E+00	0.0E+00	2.2E-07	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-08	8.0E-09
5	CADMIUM (WATER	0.0E+00	0.0E+00	8.0E-08	7.1E-09	0.0E+00	0.0E+00
6	CHROMIUM	1.1E-10	0.0E+00	1.4E-07	1.2E-08	1.7E-06	NA
7	MERCURY	0.0E+00	0.0E+00	6.7E-09	5.9E-10	1.6E-09	NA
8	NICKEL	2.6E-11	0.0E+00	5.7E-07	5.0E-08	2.9E-07	NA
9	NITRATE	0.0E+00	0.0E+00	8.7E-06	7.7E-07	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	9.9E-08	8.8E-09	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	8.8E-09	7.8E-10	1.9E-08	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	1.1E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
14	ACETONE	4.2E-12	8.9E-18	9.0E-08	4.6E-09	2.2E-08	NA
15	BENZENE	4.2E-12	6.2E-20	0.0E+00	0.0E+00	0.0E+00	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	4.2E-12	2.9E-21	0.0E+00	0.0E+00	0.0E+00	NA
18	METHYLISOBUTYL	4.2E-12	1.1E-21	0.0E+00	0.0E+00	0.0E+00	NA
19	TOLUENE	4.2E-12	1.1E-20	0.0E+00	0.0E+00	0.0E+00	NA
20	XYLENES, TOTAL	4.2E-12	4.1E-20	0.0E+00	0.0E+00	0.0E+00	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.3E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.1E-08	NA
27	ANTHRACENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.4E-08	NA
28	BENZO [a] ANTH	1.5E-11	0.0E+00	0.0E+00	0.0E+00	3.1E-08	NA
29	BENZO [a] PYRE	6.0E-12	0.0E+00	0.0E+00	0.0E+00	2.6E-08	NA
30	BENZO [b] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.4E-08	NA
31	BENZO [g,h,i]	2.9E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.2E-08	NA
33	BIS (2-ETHYLHE	2.3E-12	0.0E+00	1.5E-07	4.5E-07	3.8E-08	NA
34	CHRYSENE	7.5E-12	0.0E+00	0.0E+00	0.0E+00	3.7E-08	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	6.8E-08	NA
37	FLUORENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
38	INDENO [1,2,3-	3.6E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
39	NAPHTHALENE	2.3E-12	1.1E-22	0.0E+00	0.0E+00	0.0E+00	NA
40	PHENANTHRENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	5.6E-08	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.5E-11	0.0E+00	0.0E+00	0.0E+00	6.7E-08	NA

CHRONIC RISK SUMMARY

CURRENT
CHILD (CL)

CHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	NA	NA	2E-04	2E-05	2E-03	NA
2	BARIUM	6E-06	0E+00	8E-06	7E-06	4E-05	NA
3	BERYLLIUM	NA	NA	0E+00	0E+00	4E-05	NA
4	CADMIUM (FOOD)	NA	NA	0E+00	0E+00	4E-05	3E-04
5	CADMIUM (WATER	NA	NA	8E-05	1E-04	0E+00	0E+00
6	CHROMIUM	2E-04	0E+00	3E-05	5E-05	3E-04	NA
7	MERCURY	0E+00	0E+00	2E-05	1E-05	5E-06	NA
8	NICKEL	NA	NA	3E-05	5E-05	1E-05	NA
9	NITRATE	NA	NA	5E-06	NA	0E+00	NA
10	NITRITE	NA	NA	1E-06	NA	0E+00	NA
11	SILVER	NA	NA	2E-06	5E-07	4E-06	NA
12	THALLIUM	NA	NA	0E+00	0E+00	0E+00	NA
13	VANADIUM	NA	NA	0E+00	0E+00	0E+00	NA
14	ACETONE	NA	NA	9E-07	5E-08	2E-07	NA
15	BENZENE	NA	NA	NA	NA	NA	NA
16	CARBON DISULFI	0E+00	0E+00	0E+00	0E+00	0E+00	NA
17	ETHYLBENZENE	1E-11	0E+00	0E+00	0E+00	0E+00	NA
18	METHYLISOBUTYL	2E-10	0E+00	0E+00	0E+00	0E+00	NA
19	TOLUENE	7E-12	0E+00	0E+00	0E+00	0E+00	NA
20	XYLENES, TOTAL	5E-11	0E+00	0E+00	0E+00	0E+00	NA
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
23	2,4-DIMETHYLPH	NA	NA	0E+00	0E+00	0E+00	NA
24	2-METHYLNAPHTH	NA	NA	0E+00	NA	0E+00	NA
25	2-METHYLPHENOL	NA	NA	0E+00	0E+00	0E+00	NA
26	ACENAPHTHENE	NA	NA	0E+00	NA	2E-07	NA
27	ANTHRACENE	NA	NA	0E+00	NA	5E-08	NA
28	BENZO [a] ANTH	NA	NA	0E+00	NA	1E-06	NA
29	BENZO [a] PYRE	NA	NA	0E+00	NA	9E-07	NA
30	BENZO [b] FLUO	NA	NA	0E+00	NA	1E-06	NA
31	BENZO [g,h,i]	NA	NA	0E+00	NA	0E+00	NA
32	BENZO [k] FLUO	NA	NA	0E+00	NA	1E-06	NA
33	BIS (2-ETHYLHE	NA	NA	8E-06	2E-05	2E-06	NA
34	CHRYSENE	NA	NA	0E+00	NA	1E-06	NA
35	DIBENZ [a,h] A	NA	NA	0E+00	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	0E+00	NA	2E-06	NA
37	FLUORENE	NA	NA	0E+00	NA	3E-07	NA
38	INDENO [1,2,3-	NA	NA	0E+00	NA	4E-07	NA
39	NAPHTHALENE	NA	NA	0E+00	NA	0E+00	NA
40	PHENANTHRENE	NA	NA	0E+00	NA	2E-06	NA
41	PHENOL	NA	NA	0E+00	0E+00	0E+00	NA
42	PYRENE	NA	NA	0E+00	NA	2E-06	NA

43	2,2-BIS (PARA-	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
44	2,2-BIS (PARA-	1.2E-11	0.0E+00	7.6E-10	1.9E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
45	2,2-BIS (PARA-	1.2E-11	0.0E+00	8.5E-10	1.8E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	1.8E-10	1.4E-07	0.0E+00	NA	NA	NA	3E-06	2E-03	0E+00	NA
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
49	BENZOIC ACID	0.0E+00	0.0E+00	3.2E-07	2.1E-07	1.3E-08	NA	NA	NA	8E-08	5E-08	3E-09	NA
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
51	DIELDRIN	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	4.1E-10	3.5E-09	0.0E+00	NA	NA	NA	7E-06	6E-05	0E+00	NA
53	HEPTACHLOR	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
54	HEPTACHLOR EPO	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
57	PCB 1260	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
							PATHWAY SUM (HI)	2E-04	0E+00	4E-04	2E-03	2E-03	3E-04
							POPULATION TOTAL	5E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP1
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

CURRENT
CHILD (CL)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	4.8E-09	4.2E-10	3.8E-08	NA
2	BARIUM	5.0E-11	0.0E+00	4.7E-08	4.1E-09	2.1E-07	NA
3	BERYLLIUM	8.1E-13	0.0E+00	0.0E+00	0.0E+00	1.8E-08	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.5E-09	7.0E-10
5	CADMIUM (WATER	0.0E+00	0.0E+00	7.1E-09	6.2E-10	0.0E+00	0.0E+00
6	CHROMIUM	9.2E-12	0.0E+00	1.2E-08	1.1E-09	1.5E-07	NA
7	MERCURY	0.0E+00	0.0E+00	5.9E-10	5.2E-11	1.3E-10	NA
8	NICKEL	2.3E-12	0.0E+00	5.0E-08	4.4E-09	2.4E-08	NA
9	NITRATE	0.0E+00	0.0E+00	7.7E-07	6.8E-08	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	8.8E-09	7.7E-10	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	7.8E-10	6.8E-11	1.6E-09	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	9.1E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
14	ACETONE	3.7E-13	7.7E-19	8.0E-09	4.0E-10	1.9E-09	NA
15	BENZENE	3.7E-13	5.3E-21	0.0E+00	0.0E+00	0.0E+00	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	3.7E-13	2.5E-22	0.0E+00	0.0E+00	0.0E+00	NA
18	METHYLISOBUTYL	3.7E-13	9.9E-23	0.0E+00	0.0E+00	0.0E+00	NA
19	TOLUENE	3.7E-13	9.9E-22	0.0E+00	0.0E+00	0.0E+00	NA
20	XYLENES, TOTAL	3.7E-13	3.5E-21	0.0E+00	0.0E+00	0.0E+00	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.0E-13	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.0E-13	0.0E+00	0.0E+00	0.0E+00	9.2E-10	NA
27	ANTHRACENE	2.0E-13	0.0E+00	0.0E+00	0.0E+00	1.2E-09	NA
28	BENZO [a] ANTH	1.3E-12	0.0E+00	0.0E+00	0.0E+00	2.6E-09	NA
29	BENZO [a] PYRE	5.2E-13	0.0E+00	0.0E+00	0.0E+00	2.2E-09	NA
30	BENZO [b] FLUO	5.2E-13	0.0E+00	0.0E+00	0.0E+00	2.8E-09	NA
31	BENZO [g,h,i]	2.5E-13	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	5.2E-13	0.0E+00	0.0E+00	0.0E+00	2.7E-09	NA
33	BIS (2-ETHYLHE	2.0E-13	0.0E+00	1.4E-08	3.9E-08	3.2E-09	NA
34	CHRYSENE	6.5E-13	0.0E+00	0.0E+00	0.0E+00	3.1E-09	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.2E-12	0.0E+00	0.0E+00	0.0E+00	5.7E-09	NA
37	FLUORENE	2.0E-13	0.0E+00	0.0E+00	0.0E+00	1.0E-09	NA
38	INDENO [1,2,3-	3.2E-13	0.0E+00	0.0E+00	0.0E+00	1.0E-09	NA
39	NAPHTHALENE	2.0E-13	9.1E-24	0.0E+00	0.0E+00	0.0E+00	NA
40	PHENANTHRENE	1.2E-12	0.0E+00	0.0E+00	0.0E+00	4.7E-09	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.3E-12	0.0E+00	0.0E+00	0.0E+00	5.6E-09	NA

LIFETIME RISK SUMMARY

CURRENT
CHILD (CL)

LIFETIME EXCESS CANCER RISK

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0E+00	0E+00	8E-09	7E-10	7E-08	NA
2	BARIUM	NA	NA	NA	NA	NA	NA
3	BERYLLIUM	7E-12	0E+00	0E+00	0E+00	8E-08	NA
4	CADMIUM (FOOD)	0E+00	0E+00	NA	NA	NA	NA
5	CADMIUM (WATER	0E+00	0E+00	NA	NA	NA	NA
6	CHROMIUM	4E-10	0E+00	NA	NA	NA	NA
7	MERCURY	NA	NA	NA	NA	NA	NA
8	NICKEL	NA	NA	NA	NA	NA	NA
9	NITRATE	NA	NA	NA	NA	NA	NA
10	NITRITE	NA	NA	NA	NA	NA	NA
11	SILVER	NA	NA	NA	NA	NA	NA
12	THALLIUM	NA	NA	NA	NA	NA	NA
13	VANADIUM	NA	NA	NA	NA	NA	NA
14	ACETONE	NA	NA	NA	NA	NA	NA
15	BENZENE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
16	CARBON DISULFI	NA	NA	NA	NA	NA	NA
17	ETHYLBENZENE	NA	NA	NA	NA	NA	NA
18	METHYLISOBUTYL	NA	NA	NA	NA	NA	NA
19	TOLUENE	NA	NA	NA	NA	NA	NA
20	XYLENES, TOTAL	NA	NA	NA	NA	NA	NA
21	1,2-DIMETHYLBE	NA	NA	NA	NA	NA	NA
22	1,3-DIMETHYLBE	NA	NA	NA	NA	NA	NA
23	2,4-DIMETHYLPH	NA	NA	NA	NA	NA	NA
24	2-METHYLNAPHTH	NA	NA	NA	NA	NA	NA
25	2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
26	ACENAPHTHENE	NA	NA	NA	NA	NA	NA
27	ANTHRACENE	NA	NA	NA	NA	NA	NA
28	BENZO [a] ANTH	NA	NA	0E+00	NA	1E-09	NA
29	BENZO [a] PYRE	NA	NA	0E+00	NA	1E-08	NA
30	BENZO [b] FLUO	NA	NA	0E+00	NA	2E-09	NA
31	BENZO [g,h,i]	NA	NA	NA	NA	NA	NA
32	BENZO [k] FLUO	NA	NA	0E+00	NA	2E-09	NA
33	BIS (2-ETHYLHE	NA	NA	2E-10	5E-10	4E-11	NA
34	CHRYSENE	NA	NA	0E+00	NA	2E-10	NA
35	DIBENZ [a,h] A	NA	NA	0E+00	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	NA	NA	NA	NA
37	FLUORENE	NA	NA	NA	NA	NA	NA
38	INDENO [1,2,3-	NA	NA	0E+00	NA	6E-10	NA
39	NAPHTHALENE	NA	NA	NA	NA	NA	NA
40	PHENANTHRENE	NA	NA	NA	NA	NA	NA
41	PHENOL	NA	NA	NA	NA	NA	NA
42	PYRENE	NA	NA	NA	NA	NA	NA

43 2,2-BIS (PARA-	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
44 2,2-BIS (PARA-	1.0E-12	0.0E+00	6.8E-11	1.7E-09	2.6E-09	NA	NA	NA	2E-11	6E-10	9E-10	NA
45 2,2-BIS (PARA-	1.0E-12	0.0E+00	7.6E-11	1.6E-09	2.6E-09	NA	NA	NA	2E-11	4E-10	6E-10	NA
46 ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
47 ALPHA CHLORDAN	0.0E+00	0.0E+00	1.6E-11	1.3E-08	0.0E+00	NA	0E+00	0E+00	2E-11	2E-08	0E+00	NA
48 BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
49 BENZOIC ACID	0.0E+00	0.0E+00	2.9E-08	1.8E-08	1.1E-09	NA	NA	NA	NA	NA	NA	NA
50 BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
51 DIELDRIN	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	2E-11	0E+00	0E+00	0E+00	0E+00	NA
52 GAMMA-CHLORDAN	0.0E+00	0.0E+00	3.6E-11	3.1E-10	0.0E+00	NA	0E+00	0E+00	5E-11	4E-10	0E+00	NA
53 HEPTACHLOR	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	5E-12	0E+00	0E+00	0E+00	0E+00	NA
54 HEPTACHLOR EPO	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	9E-12	0E+00	0E+00	0E+00	0E+00	NA
55 LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
56 METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
57 PCB 1260	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	0E+00	0E+00	0E+00	0E+00
58 2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	NA	NA
59 2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
60 2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	NA	NA
61 TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
						TOTAL PATHWAY CANCER RISK	4E-10	0E+00	8E-09	2E-08	2E-07	0E+00
						POPULATION TOTAL EXCESS RISK	2E-07					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP2
LAST UPDATED: 06/09/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
CHILD (CL-B)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0
		ORAL	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	8.4E-04					
3	BERYLLIUM	0.0E+00					
4	CADMIUM (FOOD)	6.1E-05					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.8E-03					
7	MERCURY	1.5E-05					
8	NICKEL	1.2E-03					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	1.2E-05					
12	THALLIUM	0.0E+00					
13	VANADIUM	0.0E+00					
14	ACETONE	0.0E+00					
15	BENZENE	0.0E+00					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	0.0E+00					
18	METHYLISOBUTYL	0.0E+00					
19	TOLUENE	0.0E+00					
20	XYLENES, TOTAL	0.0E+00					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	0.0E+00					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	0.0E+00					
27	ANTHRACENE	0.0E+00					
28	BENZO [a] ANTH	0.0E+00					
29	BENZO [a] PYRE	0.0E+00					
30	BENZO [b] FLUO	0.0E+00					
31	BENZO [g,h,i]	0.0E+00					
32	BENZO [k] FLUO	0.0E+00					
33	BIS (2-ETHYLHE	0.0E+00					
34	CHRYSENE	0.0E+00					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	0.0E+00					
37	FLUORENE	0.0E+00					
38	INDENO [1,2,3-	0.0E+00					
39	NAPHTHALENE	0.0E+00					
40	PHENANTHRENE	0.0E+00					
41	PHENOL	0.0E+00					
42	PYRENE	0.0E+00					

SUBCHRONIC RISK SUMMARY

CURRENT
CHILD (CL-B)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
CAM-LAKE (B	0	0	0	0	0
FISH	0	0	0	0	0
ORAL	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
1E-02					
0E+00					
NA					
NA					
9E-02					
5E-02					
6E-02					
NA					
NA					
2E-03					
0E+00					
0E+00					
0E+00					
NA					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
NA					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					

43	2,2-BIS (PARA-	0.0E+00					0E+00	
44	2,2-BIS (PARA-	3.1E-05					NA	
45	2,2-BIS (PARA-	3.8E-05					NA	
46	ALDRIN	0.0E+00					0E+00	
47	ALPHA CHLORDAN	8.2E-06					1E-01	
48	BENZALDEHYDE	0.0E+00					0E+00	
49	BENZOIC ACID	0.0E+00					0E+00	
50	BETA-ENDOSULFA	0.0E+00					0E+00	
51	DIELDRIN	0.0E+00					0E+00	
52	GAMMA-CHLORDAN	8.7E-06					1E-01	
53	HEPTACHLOR	0.0E+00					0E+00	
54	HEPTACHLOR EPO	0.0E+00					NA	
55	LINDANE / GAMA	0.0E+00					0E+00	
56	METHOXYCHLOR	0.0E+00					0E+00	
57	PCB 1260	5.1E-05					NA	
58	2,4,5-TRICHLOR	0.0E+00					0E+00	
59	2,4-DICHLOROPH	0.0E+00					0E+00	
60	2-(2,4,5-TRICH	0.0E+00					0E+00	
61	TRICHLOROFLUOR	0.0E+00					0E+00	
	PATHWAY SUM (HI)		4E-01	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		4E-01					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP2
LAST UPDATED: 06/09/92

CHRONIC EXPOSURE SUMMARY | CHRONIC RISK SUMMARY

CURRENT
CHILD (CL-B)

		CHRONIC DAILY INTAKE (mg/kg/day)						CHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0	CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0	FISH	0	0	0	0	0
		ORAL	0	0	0	0	0	ORAL	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	8.4E-04						1E-02					
3	BERYLLIUM	0.0E+00						0E+00					
4	CADMIUM (FOOD)	6.1E-05						1E-01					
5	CADMIUM (WATER	0.0E+00						0E+00					
6	CHROMIUM	1.8E-03						4E-01					
7	MERCURY	1.5E-05						5E-02					
8	NICKEL	1.2E-03						6E-02					
9	NITRATE	0.0E+00						0E+00					
10	NITRITE	0.0E+00						0E+00					
11	SILVER	1.2E-05						2E-03					
12	THALLIUM	0.0E+00						0E+00					
13	VANADIUM	0.0E+00						0E+00					
14	ACETONE	0.0E+00						0E+00					
15	BENZENE	0.0E+00						NA					
16	CARBON DISULFI	0.0E+00						0E+00					
17	ETHYLBENZENE	0.0E+00						0E+00					
18	METHYLISOBUTYL	0.0E+00						0E+00					
19	TOLUENE	0.0E+00						0E+00					
20	XYLENES, TOTAL	0.0E+00						0E+00					
21	1,2-DIMETHYLBE	0.0E+00						0E+00					
22	1,3-DIMETHYLBE	0.0E+00						0E+00					
23	2,4-DIMETHYLPH	0.0E+00						0E+00					
24	2-METHYLNAPHTH	0.0E+00						0E+00					
25	2-METHYLPHENOL	0.0E+00						0E+00					
26	ACENAPHTHENE	0.0E+00						0E+00					
27	ANTHRACENE	0.0E+00						0E+00					
28	BENZO [a] ANTH	0.0E+00						0E+00					
29	BENZO [a] PYRE	0.0E+00						0E+00					
30	BENZO [b] FLUO	0.0E+00						0E+00					
31	BENZO [g,h,i]	0.0E+00						0E+00					
32	BENZO [k] FLUO	0.0E+00						0E+00					
33	BIS (2-ETHYLHE	0.0E+00						0E+00					
34	CHRYSENE	0.0E+00						0E+00					
35	DIBENZ [a,h] A	0.0E+00						0E+00					
36	FLUORANTHENE	0.0E+00						0E+00					
37	FLUORENE	0.0E+00						0E+00					
38	INDENO [1,2,3-	0.0E+00						0E+00					
39	NAPHTHALENE	0.0E+00						0E+00					
40	PHENANTHRENE	0.0E+00						0E+00					
41	PHENOL	0.0E+00						0E+00					
42	PYRENE	0.0E+00						0E+00					

43	2,2-BIS (PARA-	0.0E+00					0E+00	
44	2,2-BIS (PARA-	3.1E-05					NA	
45	2,2-BIS (PARA-	3.8E-05					NA	
46	ALDRIN	0.0E+00					0E+00	
47	ALPHA CHLORDAN	8.2E-06					1E-01	
48	BENZALDEHYDE	0.0E+00					0E+00	
49	BENZOIC ACID	0.0E+00					0E+00	
50	BETA-ENDOSULFA	0.0E+00					0E+00	
51	DIELDRIN	0.0E+00					0E+00	
52	GAMMA-CHLORDAN	8.7E-06					1E-01	
53	HEPTACHLOR	0.0E+00					0E+00	
54	HEPTACHLOR EPO	0.0E+00					0E+00	
55	LINDANE / GAMA	0.0E+00					0E+00	
56	METHOXYCHLOR	0.0E+00					0E+00	
57	PCB 1260	5.1E-05					NA	
58	2,4,5-TRICHLOR	0.0E+00					0E+00	
59	2,4-DICHLOROPH	0.0E+00					0E+00	
60	2-(2,4,5-TRICH	0.0E+00					0E+00	
61	TRICHLOROFLUOR	0.0E+00					0E+00	
	PATHWAY SUM (HI)		8E-01	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		8E-01					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP2
LAST UPDATED: 06/09/92

LIFETIME EXPOSURE SUMMARY

CURRENT
CHILD (CL-B)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0
		ORAL	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	7.2E-05					
3	BERYLLIUM	0.0E+00					
4	CADMIUM (FOOD)	5.3E-06					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.6E-04					
7	MERCURY	1.3E-06					
8	NICKEL	9.9E-05					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	1.1E-06					
12	THALLIUM	0.0E+00					
13	VANADIUM	0.0E+00					
14	ACETONE	0.0E+00					
15	BENZENE	0.0E+00					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	0.0E+00					
18	METHYLISOBUTYL	0.0E+00					
19	TOLUENE	0.0E+00					
20	XYLENES, TOTAL	0.0E+00					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	0.0E+00					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	0.0E+00					
27	ANTHRACENE	0.0E+00					
28	BENZO [a] ANTH	0.0E+00					
29	BENZO [a] PYRE	0.0E+00					
30	BENZO [b] FLUO	0.0E+00					
31	BENZO [g,h,i]	0.0E+00					
32	BENZO [k] FLUO	0.0E+00					
33	BIS (2-ETHYLHE	0.0E+00					
34	CHRYSENE	0.0E+00					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	0.0E+00					
37	FLUORENE	0.0E+00					
38	INDENO [1,2,3-	0.0E+00					
39	NAPHTHALENE	0.0E+00					
40	PHENANTHRENE	0.0E+00					
41	PHENOL	0.0E+00					
42	PYRENE	0.0E+00					

LIFETIME RISK SUMMARY

CURRENT
CHILD (CL-B)

LIFETIME EXCESS CANCER RISK

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
CAM-LAKE (B	0	0	0	0	0
FISH	0	0	0	0	0
ORAL	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NA					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
0E+00					
0E+00					
NA					
0E+00					
0E+00					
0E+00					
0E+00					
NA					
NA					
0E+00					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	0.0E+00		0E+00			
44	2,2-BIS (PARA-	2.7E-06		9E-07			
45	2,2-BIS (PARA-	3.3E-06		8E-07			
46	ALDRIN	0.0E+00		0E+00			
47	ALPHA CHLORDAN	7.1E-07		9E-07			
48	BENZALDEHYDE	0.0E+00		NA			
49	BENZOIC ACID	0.0E+00		NA			
50	BETA-ENDOSULFA	0.0E+00		NA			
51	DIELDRIN	0.0E+00		0E+00			
52	GAMMA-CHLORDAN	7.5E-07		1E-06			
53	HEPTACHLOR	0.0E+00		0E+00			
54	HEPTACHLOR EPO	0.0E+00		0E+00			
55	LINDANE / GAMA	0.0E+00		0E+00			
56	METHOXYCHLOR	0.0E+00		NA			
57	PCB 1260	4.4E-06		3E-05			
58	2,4,5-TRICHLOR	0.0E+00		NA			
59	2,4-DICHLOROPH	0.0E+00		NA			
60	2-(2,4,5-TRICH	0.0E+00		NA			
61	TRICHLOROFLUOR	0.0E+00		NA			
	TOTAL PATHWAY CANCER RISK		3E-05	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK		3E-05					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP3
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
CHILD (PG)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 (FROM WS1)	SCENARIO 2 (FROM WS2)	SCENARIO 3 (FROM WS3)	SCENARIO 4 (FROM WS4)	SCENARIO 5 (FROM WS5)	SCENARIO 6 (FROM WS6)
	PIC. GND	0	0	0	0	0	0
	AIR-PART	0	0	0	0	0	0
	INHALATION	0	0	0	0	0	0
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	5.0E-09					
3	BERYLLIUM	5.2E-11					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.2E-09					
7	MERCURY	0.0E+00					
8	NICKEL	2.8E-10					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	1.1E-09					
14	ACETONE	4.5E-11					
15	BENZENE	4.5E-11					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	4.5E-11					
18	METHYLISOBUTYL	4.5E-11					
19	TOLUENE	4.5E-11					
20	XYLENES, TOTAL	4.5E-11					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	1.2E-11					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	4.0E-11					
27	ANTHRACENE	5.9E-11					
28	BENZO [a] ANTH	1.3E-10					
29	BENZO [a] PYRE	9.8E-11					
30	BENZO [b] FLUO	1.1E-10					
31	BENZO [g,h,i]	4.2E-11					
32	BENZO [k] FLUO	8.2E-11					
33	BIS (2-ETHYLHE	1.2E-11					
34	CHRYSENE	1.3E-10					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	1.9E-10					
37	FLUORENE	3.4E-11					
38	INDENO [1,2,3-	5.0E-11					
39	NAPHTHALENE	1.2E-11					
40	PHENANTHRENE	1.5E-10					
41	PHENOL	0.0E+00					
42	PYRENE	1.7E-10					

SUBCHRONIC RISK SUMMARY

CURRENT
CHILD (PG)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 (FROM WS1)	SCENARIO 2 (FROM WS2)	SCENARIO 3 (FROM WS3)	SCENARIO 4 (FROM WS4)	SCENARIO 5 (FROM WS5)	SCENARIO 6 (FROM WS6)
PIC. GND 0	0	0	0	0	0
AIR-PART 0	0	0	0	0	0
INHALATION 0	0	0	0	0	0
NA	0E+00	0E+00	0E+00	0E+00	0E+00
5E-06					
NA					
NA					
NA					
2E-04					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
2E-10					
2E-10					
8E-11					
5E-10					
0E+00					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	6.4E-11						NA
44	2,2-BIS (PARA-	6.4E-11						NA
45	2,2-BIS (PARA-	6.4E-11						NA
46	ALDRIN	0.0E+00						NA
47	ALPHA CHLORDAN	0.0E+00						NA
48	BENZALDEHYDE	0.0E+00						NA
49	BENZOIC ACID	0.0E+00						NA
50	BETA-ENDOSULFA	0.0E+00						NA
51	DIELDRIN	6.4E-11						NA
52	GAMMA-CHLORDAN	0.0E+00						NA
53	HEPTACHLOR	6.4E-11						NA
54	HEPTACHLOR EPO	6.4E-11						NA
55	LINDANE / GAMA	0.0E+00						NA
56	METHOXYCHLOR	0.0E+00						NA
57	PCB 1260	6.4E-11						NA
58	2,4,5-TRICHLOR	0.0E+00						NA
59	2,4-DICHLOROPH	0.0E+00						NA
60	2-(2,4,5-TRICH	0.0E+00						NA
61	TRICHLOROFLUOR	0.0E+00						0E+00
	PATHWAY SUM (HI)		2E-04	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		2E-04					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP3
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

CURRENT
CHILD (PG)

CHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	5.0E-09					
3	BERYLLIUM	5.2E-11					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.2E-09					
7	MERCURY	0.0E+00					
8	NICKEL	2.8E-10					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	1.1E-09					
14	ACETONE	4.5E-11					
15	BENZENE	4.5E-11					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	4.5E-11					
18	METHYLISOBUTYL	4.5E-11					
19	TOLUENE	4.5E-11					
20	XYLENES, TOTAL	4.5E-11					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	1.2E-11					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	4.0E-11					
27	ANTHRACENE	5.9E-11					
28	BENZO [a] ANTH	1.3E-10					
29	BENZO [a] PYRE	9.8E-11					
30	BENZO [b] FLUO	1.1E-10					
31	BENZO [g,h,i]	4.2E-11					
32	BENZO [k] FLUO	8.2E-11					
33	BIS (2-ETHYLHE	1.2E-11					
34	CHRYSENE	1.3E-10					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	1.9E-10					
37	FLUORENE	3.4E-11					
38	INDENO [1,2,3-	5.0E-11					
39	NAPHTHALENE	1.2E-11					
40	PHENANTHRENE	1.5E-10					
41	PHENOL	0.0E+00					
42	PYRENE	1.7E-10					

CHRONIC RISK SUMMARY

CURRENT
CHILD (PG)

CHRONIC HAZARD QUOTIENT

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
PIC. GND	0	0	0	0	0
AIR-PART	0	0	0	0	0
INHALATION	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
NA	0E+00	0E+00	0E+00	0E+00	0E+00
5E-05					
NA					
NA					
NA					
2E-03					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
2E-10					
2E-09					
8E-11					
5E-10					
0E+00					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	6.4E-11					NA		
44	2,2-BIS (PARA-	6.4E-11					NA		
45	2,2-BIS (PARA-	6.4E-11					NA		
46	ALDRIN	0.0E+00					NA		
47	ALPHA CHLORDAN	0.0E+00					NA		
48	BENZALDEHYDE	0.0E+00					NA		
49	BENZOIC ACID	0.0E+00					NA		
50	BETA-ENDOSULFA	0.0E+00					NA		
51	DIELDRIN	6.4E-11					NA		
52	GAMMA-CHLORDAN	0.0E+00					NA		
53	HEPTACHLOR	6.4E-11					NA		
54	HEPTACHLOR EPO	6.4E-11					NA		
55	LINDANE / GAMA	0.0E+00					NA		
56	METHOXYCHLOR	0.0E+00					NA		
57	PCB 1260	6.4E-11					NA		
58	2,4,5-TRICHLOR	0.0E+00					NA		
59	2,4-DICHLOROPH	0.0E+00					NA		
60	2-(2,4,5-TRICH	0.0E+00					NA		
61	TRICHLOROFLUOR	0.0E+00					0E+00		
	PATHWAY SUM (HI)		2E-03	0E+00	0E+00	0E+00	0E+00	0E+00	
	POPULATION TOTAL		2E-03						

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP3
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

CURRENT
CHILD (PG)

		LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	4.3E-10					
3	BERYLLIUM	4.5E-12					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.0E-10					
7	MERCURY	0.0E+00					
8	NICKEL	2.4E-11					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	9.1E-11					
14	ACETONE	3.9E-12					
15	BENZENE	3.9E-12					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	3.9E-12					
18	METHYLISOBUTYL	3.9E-12					
19	TOLUENE	3.9E-12					
20	XYLENES, TOTAL	3.9E-12					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	1.1E-12					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	3.4E-12					
27	ANTHRACENE	5.0E-12					
28	BENZO [a] ANTH	1.1E-11					
29	BENZO [a] PYRE	8.5E-12					
30	BENZO [b] FLUO	9.2E-12					
31	BENZO [g,h,i]	3.6E-12					
32	BENZO [k] FLUO	7.1E-12					
33	BIS (2-ETHYLHE	1.1E-12					
34	CHRYSENE	1.1E-11					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	1.6E-11					
37	FLUORENE	3.0E-12					
38	INDENO [1,2,3-	4.3E-12					
39	NAPHTHALENE	1.1E-12					
40	PHENANTHRENE	1.3E-11					
41	PHENOL	0.0E+00					
42	PYRENE	1.5E-11					

LIFETIME RISK SUMMARY

CURRENT
CHILD (PG)

		LIFETIME EXCESS CANCER RISK					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	NA					
3	BERYLLIUM	4E-11					
4	CADMIUM (FOOD)	0E+00					
5	CADMIUM (WATER	0E+00					
6	CHROMIUM	4E-09					
7	MERCURY	NA					
8	NICKEL	NA					
9	NITRATE	NA					
10	NITRITE	NA					
11	SILVER	NA					
12	THALLIUM	NA					
13	VANADIUM	NA					
14	ACETONE	NA					
15	BENZENE	0E+00					
16	CARBON DISULFI	NA					
17	ETHYLBENZENE	NA					
18	METHYLISOBUTYL	NA					
19	TOLUENE	NA					
20	XYLENES, TOTAL	NA					
21	1,2-DIMETHYLBE	NA					
22	1,3-DIMETHYLBE	NA					
23	2,4-DIMETHYLPH	NA					
24	2-METHYLNAPHTH	NA					
25	2-METHYLPHENOL	NA					
26	ACENAPHTHENE	NA					
27	ANTHRACENE	NA					
28	BENZO [a] ANTH	NA					
29	BENZO [a] PYRE	NA					
30	BENZO [b] FLUO	NA					
31	BENZO [g,h,i]	NA					
32	BENZO [k] FLUO	NA					
33	BIS (2-ETHYLHE	NA					
34	CHRYSENE	NA					
35	DIBENZ [a,h] A	NA					
36	FLUORANTHENE	NA					
37	FLUORENE	NA					
38	INDENO [1,2,3-	NA					
39	NAPHTHALENE	NA					
40	PHENANTHRENE	NA					
41	PHENOL	NA					
42	PYRENE	NA					

43	2,2-BIS (PARA-	5.5E-12						2E-12			
44	2,2-BIS (PARA-	5.5E-12						NA			
45	2,2-BIS (PARA-	5.5E-12						NA			
46	ALDRIN	0.0E+00						0E+00			
47	ALPHA CHLORDAN	0.0E+00						0E+00			
48	BENZALDEHYDE	0.0E+00						NA			
49	BENZOIC ACID	0.0E+00						NA			
50	BETA-ENDOSULFA	0.0E+00						NA			
51	DIELDRIN	5.5E-12						9E-11			
52	GAMMA-CHLORDAN	0.0E+00						0E+00			
53	HEPTACHLOR	5.5E-12						3E-11			
54	HEPTACHLOR EPO	5.5E-12						5E-11			
55	LINDANE / GAMA	0.0E+00						NA			
56	METHOXYCHLOR	0.0E+00						NA			
57	PCB 1260	5.5E-12						NA			
58	2,4,5-TRICHLOR	0.0E+00						NA			
59	2,4-DICHLOROPH	0.0E+00						NA			
60	2-(2,4,5-TRICH	0.0E+00						NA			
61	TRICHLOROFLUOR	0.0E+00						NA			
	TOTAL PATHWAY CANCER RISK							4E-09	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK							4E-09					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP4
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
CHILD (BF)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		BALL FIELD	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.8E-08					
3	BERYLLIUM	1.9E-10					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	4.3E-09					
7	MERCURY	0.0E+00					
8	NICKEL	1.0E-09					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	3.8E-09					
14	ACETONE	1.6E-10					
15	BENZENE	1.6E-10					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	1.6E-10					
18	METHYLISOBUTYL	1.6E-10					
19	TOLUENE	1.6E-10					
20	XYLENES, TOTAL	1.6E-10					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	4.5E-11					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	1.4E-10					
27	ANTHRACENE	2.1E-10					
28	BENZO (a) ANTH	4.5E-10					
29	BENZO (a) PYRE	3.5E-10					
30	BENZO (b) FLUO	3.8E-10					
31	BENZO (g,h,i)	1.5E-10					
32	BENZO (k) FLUO	3.0E-10					
33	BIS (2-ETHYLHE	4.5E-11					
34	CHRYSENE	4.5E-10					
35	DIBENZ (a,h) A	0.0E+00					
36	FLUORANTHENE	6.8E-10					
37	FLUORENE	1.2E-10					
38	INDENO (1,2,3-	1.8E-10					
39	NAPHTHALENE	4.5E-11					
40	PHENANTHRENE	5.6E-10					
41	PHENOL	0.0E+00					
42	PYRENE	6.3E-10					

SUBCHRONIC RISK SUMMARY

CURRENT
CHILD (BF)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
BALL FIELD	0	0	0	0	0
AIR-PART	0	0	0	0	0
INHALATION	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
NA	0E+00	0E+00	0E+00	0E+00	0E+00
2E-05					
NA					
NA					
NA					
7E-04					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
6E-10					
8E-10					
3E-10					
2E-09					
0E+00					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	2.3E-10	NA
44	2,2-BIS (PARA-	2.3E-10	NA
45	2,2-BIS (PARA-	2.3E-10	NA
46	ALDRIN	0.0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	NA
48	BENZALDEHYDE	0.0E+00	NA
49	BENZOIC ACID	0.0E+00	NA
50	BETA-ENDOSULFA	0.0E+00	NA
51	DIELDRIN	2.3E-10	NA
52	GAMMA-CHLORDAN	0.0E+00	NA
53	HEPTACHLOR	2.3E-10	NA
54	HEPTACHLOR EPO	2.3E-10	NA
55	LINDANE / GAMA	0.0E+00	NA
56	METHOXYCHLOR	0.0E+00	NA
57	PCB 1260	2.3E-10	NA
58	2,4,5-TRICHLOR	0.0E+00	NA
59	2,4-DICHLOROPH	0.0E+00	NA
60	2-(2,4,5-TRICH	0.0E+00	NA
61	TRICHLOROFLUOR	0.0E+00	0E+00

PATHWAY SUM (HI)	7E-04	0E+00	0E+00	0E+00	0E+00	0E+00
POPULATION TOTAL	7E-04					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP4
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY — CURRENT — CHILD (BF)

CHRONIC RISK SUMMARY — CURRENT — CHILD (BF)

		CHRONIC DAILY INTAKE (mg/kg/day)						CHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		BALL FIELD	0	0	0	0	0	BALL FIELD	0	0	0	0	0
		AIR-PART	0	0	0	0	0	AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0	INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	1.8E-08						2E-04					
3	BERYLLIUM	1.9E-10						NA					
4	CADMIUM (FOOD)	0.0E+00						NA					
5	CADMIUM (WATER	0.0E+00						NA					
6	CHROMIUM	4.3E-09						7E-03					
7	MERCURY	0.0E+00						0E+00					
8	NICKEL	1.0E-09						NA					
9	NITRATE	0.0E+00						NA					
10	NITRITE	0.0E+00						NA					
11	SILVER	0.0E+00						NA					
12	THALLIUM	0.0E+00						NA					
13	VANADIUM	3.8E-09						NA					
14	ACETONE	1.6E-10						NA					
15	BENZENE	1.6E-10						NA					
16	CARBON DISULFI	0.0E+00						0E+00					
17	ETHYLBENZENE	1.6E-10						6E-10					
18	METHYLISOBUTYL	1.6E-10						8E-09					
19	TOLUENE	1.6E-10						3E-10					
20	XYLENES, TOTAL	1.6E-10						2E-09					
21	1,2-DIMETHYLBE	0.0E+00						0E+00					
22	1,3-DIMETHYLBE	0.0E+00						0E+00					
23	2,4-DIMETHYLPH	0.0E+00						NA					
24	2-METHYLNAPHTH	4.5E-11						NA					
25	2-METHYLPHENOL	0.0E+00						NA					
26	ACENAPHTHENE	1.4E-10						NA					
27	ANTHRACENE	2.1E-10						NA					
28	BENZO [a] ANTH	4.5E-10						NA					
29	BENZO [a] PYRE	3.5E-10						NA					
30	BENZO [b] FLUO	3.8E-10						NA					
31	BENZO [g,h,i]	1.5E-10						NA					
32	BENZO [k] FLUO	3.0E-10						NA					
33	BIS (2-ETHYLHE	4.5E-11						NA					
34	CHRYSENE	4.5E-10						NA					
35	DIBENZ [a,h] A	0.0E+00						NA					
36	FLUORANTHENE	6.8E-10						NA					
37	FLUORENE	1.2E-10						NA					
38	INDENO [1,2,3-	1.8E-10						NA					
39	NAPHTHALENE	4.5E-11						NA					
40	PHENANTHRENE	5.6E-10						NA					
41	PHENOL	0.0E+00						NA					
42	PYRENE	6.3E-10						NA					

43	2,2-BIS (PARA-	2.3E-10	NA
44	2,2-BIS (PARA-	2.3E-10	NA
45	2,2-BIS (PARA-	2.3E-10	NA
46	ALDRIN	0.0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	NA
48	BENZALDEHYDE	0.0E+00	NA
49	BENZOIC ACID	0.0E+00	NA
50	BETA-ENDOSULFA	0.0E+00	NA
51	DIELDRIN	2.3E-10	NA
52	GAMMA-CHLORDAN	0.0E+00	NA
53	HEPTACHLOR	2.3E-10	NA
54	HEPTACHLOR EPO	2.3E-10	NA
55	LINDANE / GAMA	0.0E+00	NA
56	METHOXYCHLOR	0.0E+00	NA
57	PCB 1260	2.3E-10	NA
58	2,4,5-TRICHLOR	0.0E+00	NA
59	2,4-DICHLOROPH	0.0E+00	NA
60	2-(2,4,5-TRICH	0.0E+00	NA
61	TRICHLOROFLUOR	0.0E+00	0E+00

PATHWAY SUM (HI)	7E-03	0E+00	0E+00	0E+00	0E+00	0E+00
POPULATION TOTAL	7E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP4
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY — CURRENT — CHILD (BF)

LIFETIME RISK SUMMARY — CURRENT — CHILD (BF)

		LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)						LIFETIME EXCESS CANCER RISK					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		BALL FIELD	0	0	0	0	0	BALL FIELD	0	0	0	0	0
		AIR-PART	0	0	0	0	0	AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0	INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	1.5E-09						NA					
3	BERYLLIUM	1.6E-11						1E-10					
4	CADMIUM (FOOD)	0.0E+00						0E+00					
5	CADMIUM (WATER	0.0E+00						0E+00					
6	CHROMIUM	3.7E-10						2E-08					
7	MERCURY	0.0E+00						NA					
8	NICKEL	8.7E-11						NA					
9	NITRATE	0.0E+00						NA					
10	NITRITE	0.0E+00						NA					
11	SILVER	0.0E+00						NA					
12	THALLIUM	0.0E+00						NA					
13	VANADIUM	3.2E-10						NA					
14	ACETONE	1.4E-11						NA					
15	BENZENE	1.4E-11						0E+00					
16	CARBON DISULFI	0.0E+00						NA					
17	ETHYLBENZENE	1.4E-11						NA					
18	METHYLISOBUTYL	1.4E-11						NA					
19	TOLUENE	1.4E-11						NA					
20	XYLENES, TOTAL	1.4E-11						NA					
21	1,2-DIMETHYLBE	0.0E+00						NA					
22	1,3-DIMETHYLBE	0.0E+00						NA					
23	2,4-DIMETHYLPH	0.0E+00						NA					
24	2-METHYLNAPHTH	3.8E-12						NA					
25	2-METHYLPHENOL	0.0E+00						NA					
26	ACENAPHTHENE	1.2E-11						NA					
27	ANTHRACENE	1.8E-11						NA					
28	BENZO [a] ANTH	3.9E-11						NA					
29	BENZO [a] PYRE	3.0E-11						NA					
30	BENZO [b] FLUO	3.3E-11						NA					
31	BENZO [g,h,i]	1.3E-11						NA					
32	BENZO [k] FLUO	2.5E-11						NA					
33	BIS (2-ETHYLHE	3.8E-12						NA					
34	CHRYSENE	3.9E-11						NA					
35	DIBENZ [a,h] A	0.0E+00						NA					
36	FLUORANTHENE	5.8E-11						NA					
37	FLUORENE	1.1E-11						NA					
38	INDENO [1,2,3-	1.6E-11						NA					
39	NAPHTHALENE	3.8E-12						NA					
40	PHENANTHRENE	4.8E-11						NA					
41	PHENOL	0.0E+00						NA					
42	PYRENE	5.4E-11						NA					

43	2,2-BIS (PARA-	2.0E-11		7E-12			
44	2,2-BIS (PARA-	2.0E-11		NA			
45	2,2-BIS (PARA-	2.0E-11		NA			
46	ALDRIN	0.0E+00		0E+00			
47	ALPHA CHLORDAN	0.0E+00		0E+00			
48	BENZALDEHYDE	0.0E+00		NA			
49	BENZOIC ACID	0.0E+00		NA			
50	BETA-ENDOSULFA	0.0E+00		NA			
51	DIELDRIN	2.0E-11		3E-10			
52	GAMMA-CHLORDAN	0.0E+00		0E+00			
53	HEPTACHLOR	2.0E-11		9E-11			
54	HEPTACHLOR EPO	2.0E-11		2E-10			
55	LINDANE / GAMA	0.0E+00		NA			
56	METHOXYCHLOR	0.0E+00		NA			
57	PCB 1260	2.0E-11		NA			
58	2,4,5-TRICHLOR	0.0E+00		NA			
59	2,4-DICHLOROPH	0.0E+00		NA			
60	2-(2,4,5-TRICH	0.0E+00		NA			
61	TRICHLOROFLUOR	0.0E+00		NA			
	TOTAL PATHWAY CANCER RISK		2E-08	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK		2E-08					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP5
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD

	CHEMICAL NAME	SUBCHRONIC DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	NA				
3	BERYLLIUM	0.0E+00	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	0.0E+00	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	0.0E+00	NA				
14	ACETONE	0.0E+00	NA				
15	BENZENE	0.0E+00	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	0.0E+00	NA				
18	METHYLISOBUTYL	0.0E+00	NA				
19	TOLUENE	0.0E+00	NA				
20	XYLENES, TOTAL	0.0E+00	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	0.0E+00	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	0.0E+00	NA				
27	ANTHRACENE	0.0E+00	NA				
28	BENZO [a] ANTH	0.0E+00	NA				
29	BENZO [a] PYRE	0.0E+00	NA				
30	BENZO [b] FLUO	0.0E+00	NA				
31	BENZO [g,h,i]	0.0E+00	NA				
32	BENZO [k] FLUO	0.0E+00	NA				
33	BIS (2-ETHYLHE	0.0E+00	NA				
34	CHRYSENE	0.0E+00	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	0.0E+00	NA				
37	FLUORENE	0.0E+00	NA				
38	INDENO [1,2,3-	0.0E+00	NA				
39	NAPHTHALENE	0.0E+00	NA				
40	PHENANTHRENE	0.0E+00	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	0.0E+00	NA				

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD

	CHEMICAL NAME	SUBCHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
		(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	NA	0E+00	0E+00	0E+00	0E+00
2	BARIUM	0E+00	NA				
3	BERYLLIUM	0E+00	NA				
4	CADMIUM (FOOD)	NA	NA				
5	CADMIUM (WATER	NA	NA				
6	CHROMIUM	0E+00	NA				
7	MERCURY	0E+00	NA				
8	NICKEL	0E+00	NA				
9	NITRATE	NA	NA				
10	NITRITE	NA	NA				
11	SILVER	0E+00	NA				
12	THALLIUM	0E+00	NA				
13	VANADIUM	0E+00	NA				
14	ACETONE	0E+00	NA				
15	BENZENE	NA	NA				
16	CARBON DISULFI	0E+00	NA				
17	ETHYLBENZENE	0E+00	NA				
18	METHYLISOBUTYL	0E+00	NA				
19	TOLUENE	0E+00	NA				
20	XYLENES, TOTAL	0E+00	NA				
21	1,2-DIMETHYLBE	0E+00	NA				
22	1,3-DIMETHYLBE	0E+00	NA				
23	2,4-DIMETHYLPH	0E+00	NA				
24	2-METHYLNAPHTH	0E+00	NA				
25	2-METHYLPHENOL	NA	NA				
26	ACENAPHTHENE	0E+00	NA				
27	ANTHRACENE	0E+00	NA				
28	BENZO [a] ANTH	0E+00	NA				
29	BENZO [a] PYRE	0E+00	NA				
30	BENZO [b] FLUO	0E+00	NA				
31	BENZO [g,h,i]	0E+00	NA				
32	BENZO [k] FLUO	0E+00	NA				
33	BIS (2-ETHYLHE	0E+00	NA				
34	CHRYSENE	0E+00	NA				
35	DIBENZ [a,h] A	0E+00	NA				
36	FLUORANTHENE	0E+00	NA				
37	FLUORENE	0E+00	NA				
38	INDENO [1,2,3-	0E+00	NA				
39	NAPHTHALENE	0E+00	NA				
40	PHENANTHRENE	0E+00	NA				
41	PHENOL	0E+00	NA				
42	PYRENE	0E+00	NA				

43	2,2-BIS (PARA-	9.7E-08	NA			2E-04	NA				
44	2,2-BIS (PARA-	3.7E-09	NA			NA	NA				
45	2,2-BIS (PARA-	3.0E-08	NA			NA	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	3.1E-09	NA			5E-05	NA				
48	BENZALDEHYDE	0.0E+00	NA			0E+00	NA				
49	BENZOIC ACID	0.0E+00	NA			0E+00	NA				
50	BETA-ENDOSULFA	6.0E-10	NA			3E-06	NA				
51	DIELDRIN	1.0E-10	NA			2E-06	NA				
52	GAMMA-CHLORDAN	2.5E-09	NA			4E-05	NA				
53	HEPTACHLOR	1.3E-10	NA			3E-07	NA				
54	HEPTACHLOR EPO	2.0E-10	NA			NA	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	3.3E-08	NA			7E-06	NA				
57	PCB 1260	9.8E-09	5.2E-08			NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	NA			0E+00	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			0E+00	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			0E+00	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			0E+00	NA				
	PATHWAY SUM (HI)			3E-04	0E+00	0E+00	0E+00	0E+00	0E+00		
	POPULATION TOTAL			3E-04							

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP5
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD

		CHRONIC DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	NA				
3	BERYLLIUM	0.0E+00	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	0.0E+00	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	0.0E+00	NA				
14	ACETONE	0.0E+00	NA				
15	BENZENE	0.0E+00	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	0.0E+00	NA				
18	METHYLISOBUTYL	0.0E+00	NA				
19	TOLUENE	0.0E+00	NA				
20	XYLENES, TOTAL	0.0E+00	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	0.0E+00	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	0.0E+00	NA				
27	ANTHRACENE	0.0E+00	NA				
28	BENZO [a] ANTH	0.0E+00	NA				
29	BENZO [a] PYRE	0.0E+00	NA				
30	BENZO [b] FLUO	0.0E+00	NA				
31	BENZO [g,h,i]	0.0E+00	NA				
32	BENZO [k] FLUO	0.0E+00	NA				
33	BIS (2-ETHYLHE	0.0E+00	NA				
34	CHRYSENE	0.0E+00	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	0.0E+00	NA				
37	FLUORENE	0.0E+00	NA				
38	INDENO [1,2,3-	0.0E+00	NA				
39	NAPHTHALENE	0.0E+00	NA				
40	PHENANTHRENE	0.0E+00	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	0.0E+00	NA				

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD

		CHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	NA	0E+00	0E+00	0E+00	0E+00
2	BARIUM	0E+00	NA				
3	BERYLLIUM	0E+00	NA				
4	CADMIUM (FOOD)	0E+00	0E+00				
5	CADMIUM (WATER	0E+00	0E+00				
6	CHROMIUM	0E+00	NA				
7	MERCURY	0E+00	NA				
8	NICKEL	0E+00	NA				
9	NITRATE	0E+00	NA				
10	NITRITE	0E+00	NA				
11	SILVER	0E+00	NA				
12	THALLIUM	0E+00	NA				
13	VANADIUM	0E+00	NA				
14	ACETONE	0E+00	NA				
15	BENZENE	NA	NA				
16	CARBON DISULFI	0E+00	NA				
17	ETHYLBENZENE	0E+00	NA				
18	METHYLISOBUTYL	0E+00	NA				
19	TOLUENE	0E+00	NA				
20	XYLENES, TOTAL	0E+00	NA				
21	1,2-DIMETHYLBE	0E+00	NA				
22	1,3-DIMETHYLBE	0E+00	NA				
23	2,4-DIMETHYLPH	0E+00	NA				
24	2-METHYLNAPHTH	0E+00	NA				
25	2-METHYLPHENOL	0E+00	NA				
26	ACENAPHTHENE	0E+00	NA				
27	ANTHRACENE	0E+00	NA				
28	BENZO [a] ANTH	0E+00	NA				
29	BENZO [a] PYRE	0E+00	NA				
30	BENZO [b] FLUO	0E+00	NA				
31	BENZO [g,h,i]	0E+00	NA				
32	BENZO [k] FLUO	0E+00	NA				
33	BIS (2-ETHYLHE	0E+00	NA				
34	CHRYSENE	0E+00	NA				
35	DIBENZ [a,h] A	0E+00	NA				
36	FLUORANTHENE	0E+00	NA				
37	FLUORENE	0E+00	NA				
38	INDENO [1,2,3-	0E+00	NA				
39	NAPHTHALENE	0E+00	NA				
40	PHENANTHRENE	0E+00	NA				
41	PHENOL	0E+00	NA				
42	PYRENE	0E+00	NA				

43	2,2-BIS (PARA-	9.7E-08	NA			2E-04	NA				
44	2,2-BIS (PARA-	3.7E-09	NA			NA	NA				
45	2,2-BIS (PARA-	3.0E-08	NA			NA	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	3.1E-09	NA			5E-05	NA				
48	BENZALDEHYDE	0.0E+00	NA			0E+00	NA				
49	BENZOIC ACID	0.0E+00	NA			0E+00	NA				
50	BETA-ENDOSULFA	6.0E-10	NA			1E-05	NA				
51	DIELDRIN	1.0E-10	NA			2E-06	NA				
52	GAMMA-CHLORDAN	2.5E-09	NA			4E-05	NA				
53	HEPTACHLOR	1.3E-10	NA			3E-07	NA				
54	HEPTACHLOR EPO	2.0E-10	NA			2E-05	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	3.3E-08	NA			7E-06	NA				
57	PCB 1260	9.8E-09	5.2E-08			NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	NA			0E+00	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			0E+00	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			0E+00	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			0E+00	NA				
				PATHWAY SUM (HI)		3E-04	0E+00	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL		3E-04					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 3
FILE NAME: POP5
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-CHILD

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PCB POLES	PCB POLES	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	0.0E+00	NA				
3	BERYLLIUM	0.0E+00	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	0.0E+00	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	0.0E+00	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	0.0E+00	NA				
14	ACETONE	0.0E+00	NA				
15	BENZENE	0.0E+00	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	0.0E+00	NA				
18	METHYLISOBUTYL	0.0E+00	NA				
19	TOLUENE	0.0E+00	NA				
20	XYLENES, TOTAL	0.0E+00	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	0.0E+00	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	0.0E+00	NA				
27	ANTHRACENE	0.0E+00	NA				
28	BENZO [a] ANTH	0.0E+00	NA				
29	BENZO [a] PYRE	0.0E+00	NA				
30	BENZO [b] FLUO	0.0E+00	NA				
31	BENZO [g,h,i]	0.0E+00	NA				
32	BENZO [k] FLUO	0.0E+00	NA				
33	BIS (2-ETHYLHE	0.0E+00	NA				
34	CHRYSENE	0.0E+00	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	0.0E+00	NA				
37	FLUORENE	0.0E+00	NA				
38	INDENO [1,2,3-	0.0E+00	NA				
39	NAPHTHALENE	0.0E+00	NA				
40	PHENANTHRENE	0.0E+00	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	0.0E+00	NA				

LIFETIME RISK SUMMARY

FUTURE
RES-CHILD

LIFETIME EXCESS CANCER RISK

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
PCB POLES	PCB POLES	0	0	0	0
SOIL	SOIL	0	0	0	0
ORAL	DERMAL	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
NA	NA				
0E+00	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
NA	NA				
NA	NA				
0E+00	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	8.1E-09	NA			3E-09	NA				
44	2,2-BIS (PARA-	3.1E-10	NA			1E-10	NA				
45	2,2-BIS (PARA-	2.6E-09	NA			6E-10	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	2.6E-10	NA			3E-10	NA				
48	BENZALDEHYDE	0.0E+00	NA			NA	NA				
49	BENZOIC ACID	0.0E+00	NA			NA	NA				
50	BETA-ENDOSULFA	5.0E-11	NA			NA	NA				
51	DIELDRIN	8.5E-12	NA			1E-10	NA				
52	GAMMA-CHLORDAN	2.1E-10	NA			3E-10	NA				
53	HEPTACHLOR	1.1E-11	NA			5E-11	NA				
54	HEPTACHLOR EPO	1.7E-11	NA			2E-10	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	2.8E-09	NA			NA	NA				
57	PCB 1260	8.2E-10	4.5E-09			6E-09	3E-08				
58	2,4,5-TRICHLOR	0.0E+00	NA			NA	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			NA	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			NA	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			NA	NA				
				TOTAL PATHWAY CANCER RISK		1E-08	3E-08	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL EXCESS RISK		4E-08					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP1
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
WADER (BR)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 BACKLICK RU SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 BACKLICK RU SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 BACKLICK RU SEDIMENT ORAL (FROM WS3)	SCENARIO 4 BACKLICK RU SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	4.0E-07	2.0E-07	1.6E-07	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.6E-09	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	1.6E-08	8.0E-09	0.0E+00	0.0E+00		
6	CHROMIUM	4.8E-08	2.4E-08	4.4E-08	NA		
7	MERCURY	2.4E-09	1.2E-09	5.7E-10	NA		
8	NICKEL	2.0E-07	1.0E-07	0.0E+00	NA		
9	NITRATE	7.0E-06	3.5E-06	0.0E+00	NA		
10	NITRITE	3.5E-08	1.8E-08	0.0E+00	NA		
11	SILVER	3.0E-09	1.5E-09	6.6E-09	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	3.2E-08	9.1E-09	7.8E-09	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	0.0E+00	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	0.0E+00	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	0.0E+00	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	2.1E-09	NA		
34	CHRYSENE	0.0E+00	0.0E+00	0.0E+00	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
37	FLUORENE	0.0E+00	0.0E+00	0.0E+00	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	0.0E+00	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	0.0E+00	NA		

SUBCHRONIC RISK SUMMARY

CURRENT
WADER (BR)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 BACKLICK RU SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 BACKLICK RU SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 BACKLICK RU SEDIMENT ORAL (FROM WS3)	SCENARIO 4 BACKLICK RU SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
6E-06	3E-05	2E-06	NA		
0E+00	0E+00	3E-07	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
2E-06	2E-05	2E-06	NA		
8E-06	2E-05	2E-06	NA		
1E-05	1E-04	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
6E-07	1E-06	1E-06	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
3E-08	9E-09	8E-09	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	1E-07	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44	2,2-BIS (PARA-	2.7E-10	3.8E-08	1.1E-08	NA		NA	NA	NA	NA	
45	2,2-BIS (PARA-	3.0E-10	3.6E-08	1.1E-08	NA		NA	NA	NA	NA	
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47	ALPHA CHLORDAN	6.5E-11	2.9E-07	0.0E+00	NA		1E-06	5E-03	0E+00	NA	
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
49	BENZOIC ACID	1.6E-07	5.8E-07	2.1E-09	NA		4E-08	1E-07	5E-10	NA	
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52	GAMMA-CHLORDAN	1.4E-10	7.0E-09	0.0E+00	NA		2E-06	1E-04	0E+00	NA	
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA	
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	

PATHWAY SUM (HI)	3E-05	5E-03	7E-06	0E+00	0E+00	0E+00
POPULATION TOTAL	5E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP1
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

CURRENT
WADER (BR)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 BACKLICK RU SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 BACKLICK RU SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 BACKLICK RU SEDIMENT ORAL (FROM WS3)	SCENARIO 4 BACKLICK RU SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	4.0E-07	2.0E-07	1.6E-07	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.6E-09	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	1.6E-08	8.0E-09	0.0E+00	0.0E+00		
6	CHROMIUM	4.8E-08	2.4E-08	4.4E-08	NA		
7	MERCURY	2.4E-09	1.2E-09	5.7E-10	NA		
8	NICKEL	2.0E-07	1.0E-07	0.0E+00	NA		
9	NITRATE	7.0E-06	3.5E-06	0.0E+00	NA		
10	NITRITE	3.5E-08	1.8E-08	0.0E+00	NA		
11	SILVER	3.0E-09	1.5E-09	6.6E-09	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	3.2E-08	9.1E-09	7.8E-09	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	0.0E+00	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	0.0E+00	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	0.0E+00	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	2.1E-09	NA		
34	CHRYSENE	0.0E+00	0.0E+00	0.0E+00	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
37	FLUORENE	0.0E+00	0.0E+00	0.0E+00	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	0.0E+00	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	0.0E+00	NA		

CHRONIC RISK SUMMARY

CURRENT
WADER (BR)

CHRONIC HAZARD QUOTIENT

SCENARIO 1 BACKLICK RU SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 BACKLICK RU SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 BACKLICK RU SEDIMENT ORAL (FROM WS3)	SCENARIO 4 BACKLICK RU SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
6E-06	3E-05	2E-06	NA		
0E+00	0E+00	3E-07	NA		
0E+00	0E+00	0E+00	0E+00		
2E-05	1E-04	0E+00	0E+00		
1E-05	1E-04	9E-06	NA		
8E-06	2E-05	2E-06	NA		
1E-05	1E-04	0E+00	NA		
4E-06	NA	0E+00	NA		
4E-07	NA	0E+00	NA		
6E-07	1E-06	1E-06	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
3E-07	9E-08	8E-08	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	1E-07	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44	2,2-BIS (PARA-	2.7E-10	3.8E-08	1.1E-08	NA		NA	NA	NA	NA	
45	2,2-BIS (PARA-	3.0E-10	3.6E-08	1.1E-08	NA		NA	NA	NA	NA	
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47	ALPHA CHLORDAN	6.5E-11	2.9E-07	0.0E+00	NA		1E-06	5E-03	0E+00	NA	
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
49	BENZOIC ACID	1.6E-07	5.8E-07	2.1E-09	NA		4E-08	1E-07	5E-10	NA	
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52	GAMMA-CHLORDAN	1.4E-10	7.0E-09	0.0E+00	NA		2E-06	1E-04	0E+00	NA	
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA	
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	

PATHWAY SUM (HI)	6E-05	5E-03	1E-05	0E+00	0E+00	0E+00
POPULATION TOTAL	5E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP1
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

CURRENT
WADER (BR)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 BACKLICK RU SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 BACKLICK RU SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 BACKLICK RU SEDIMENT ORAL (FROM WS3)	SCENARIO 4 BACKLICK RU SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	3.4E-08	1.7E-08	1.4E-08	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.4E-10	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	1.4E-09	6.8E-10	0.0E+00	0.0E+00		
6	CHROMIUM	4.1E-09	2.0E-09	3.8E-09	NA		
7	MERCURY	2.0E-10	1.00E-10	4.8E-11	NA		
8	NICKEL	1.7E-08	8.5E-09	0.0E+00	NA		
9	NITRATE	6.0E-07	2.9E-07	0.0E+00	NA		
10	NITRITE	3.0E-09	1.5E-09	0.0E+00	NA		
11	SILVER	2.6E-10	1.3E-10	5.6E-10	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	2.8E-09	7.7E-10	6.6E-10	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	0.0E+00	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	0.0E+00	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	0.0E+00	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	1.8E-10	NA		
34	CHRYSENE	0.0E+00	0.0E+00	0.0E+00	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
37	FLUORENE	0.0E+00	0.0E+00	0.0E+00	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	0.0E+00	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	0.0E+00	NA		

LIFETIME RISK SUMMARY

CURRENT
WADER (BR)

LIFETIME EXCESS CANCER RISK

SCENARIO 1 BACKLICK RU SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 BACKLICK RU SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 BACKLICK RU SEDIMENT ORAL (FROM WS3)	SCENARIO 4 BACKLICK RU SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
NA	NA	NA	NA		
0E+00	0E+00	6E-10	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	3E-12	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		

43 2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44 2,2-BIS (PARA-	2.3E-11	3.2E-09	9.4E-10	NA		8E-12	1E-09	3E-10	NA	
45 2,2-BIS (PARA-	2.6E-11	3.1E-09	9.4E-10	NA		6E-12	7E-10	2E-10	NA	
46 ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47 ALPHA CHLORDAN	5.6E-12	2.4E-08	0.0E+00	NA		7E-12	3E-08	0E+00	NA	
48 BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
49 BENZOIC ACID	1.4E-08	4.9E-08	1.8E-10	NA		NA	NA	NA	NA	
50 BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
51 DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52 GAMMA-CHLORDAN	1.2E-11	5.9E-10	0.0E+00	NA		2E-11	8E-10	0E+00	NA	
53 HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54 HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
55 LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56 METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
57 PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00	
58 2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		NA	NA	NA	NA	
59 2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
60 2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		NA	NA	NA	NA	
61 TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	

TOTAL PATHWAY CANCER RISK	4E-11	3E-08	1E-09	0E+00	0E+00	0E+00

POPULATION TOTAL EXCESS RISK 3E-08

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP2
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
WADER (HR)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 HOLMES RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 HOLMES RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 HOLMES RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 HOLMES RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 (FROM WS5)	SCENARIO 6 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	2.5E-07	1.3E-07	1.8E-07	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.1E-08	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	3.3E-08	1.6E-08	0.0E+00	0.0E+00		
6	CHROMIUM	4.8E-08	2.4E-08	7.0E-08	NA		
7	MERCURY	2.4E-09	1.2E-09	5.7E-10	NA		
8	NICKEL	2.0E-07	1.0E-07	0.0E+00	NA		
9	NITRATE	1.4E-05	7.2E-06	0.0E+00	NA		
10	NITRITE	3.5E-08	1.8E-08	0.0E+00	NA		
11	SILVER	1.6E-09	8.0E-10	6.6E-09	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	3.2E-08	9.1E-09	7.8E-09	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	2.1E-09	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	2.1E-09	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	9.1E-09	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	7.8E-09	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	7.3E-09	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	7.8E-09	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	2.1E-09	NA		
34	CHRYSENE	0.0E+00	0.0E+00	1.1E-08	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	2.1E-08	NA		
37	FLUORENE	0.0E+00	0.0E+00	2.1E-09	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	2.1E-08	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	2.0E-08	NA		

SUBCHRONIC RISK SUMMARY

CURRENT
WADER (HR)

SUBCHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 HOLMES RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 HOLMES RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 HOLMES RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 HOLMES RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 (FROM WS5)	SCENARIO 6 0 0 (FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	NA	0E+00	0E+00
2	BARIUM	4E-06	2E-05	3E-06	NA		
3	BERYLLIUM	0E+00	0E+00	2E-06	NA		
4	CADMIUM (FOOD)	NA	NA	NA	NA		
5	CADMIUM (WATER	NA	NA	NA	NA		
6	CHROMIUM	2E-06	2E-05	4E-06	NA		
7	MERCURY	8E-06	2E-05	2E-06	NA		
8	NICKEL	1E-05	1E-04	0E+00	NA		
9	NITRATE	NA	NA	NA	NA		
10	NITRITE	NA	NA	NA	NA		
11	SILVER	3E-07	5E-07	1E-06	NA		
12	THALLIUM	0E+00	0E+00	0E+00	NA		
13	VANADIUM	0E+00	0E+00	0E+00	NA		
14	ACETONE	3E-08	9E-09	8E-09	NA		
15	BENZENE	NA	NA	NA	NA		
16	CARBON DISULFI	0E+00	0E+00	0E+00	NA		
17	ETHYLBENZENE	0E+00	0E+00	0E+00	NA		
18	METHYLISOBUTYL	0E+00	0E+00	0E+00	NA		
19	TOLUENE	0E+00	0E+00	0E+00	NA		
20	XYLENES, TOTAL	0E+00	0E+00	0E+00	NA		
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	NA		
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	NA		
23	2,4-DIMETHYLPH	0E+00	0E+00	0E+00	NA		
24	2-METHYLNAPHTH	0E+00	NA	0E+00	NA		
25	2-METHYLPHENOL	NA	NA	NA	NA		
26	ACENAPHTHENE	0E+00	NA	4E-09	NA		
27	ANTHRACENE	0E+00	NA	7E-10	NA		
28	BENZO [a] ANTH	0E+00	NA	3E-08	NA		
29	BENZO [a] PYRE	0E+00	NA	3E-08	NA		
30	BENZO [b] FLUO	0E+00	NA	2E-08	NA		
31	BENZO [g,h,i]	0E+00	NA	0E+00	NA		
32	BENZO [k] FLUO	0E+00	NA	3E-08	NA		
33	BIS (2-ETHYLHE	0E+00	0E+00	1E-07	NA		
34	CHRYSENE	0E+00	NA	4E-08	NA		
35	DIBENZ [a,h] A	0E+00	NA	0E+00	NA		
36	FLUORANTHENE	0E+00	NA	5E-08	NA		
37	FLUORENE	0E+00	NA	5E-09	NA		
38	INDENO [1,2,3-	0E+00	NA	0E+00	NA		
39	NAPHTHALENE	0E+00	NA	0E+00	NA		
40	PHENANTHRENE	0E+00	NA	7E-08	NA		
41	PHENOL	0E+00	0E+00	0E+00	NA		
42	PYRENE	0E+00	NA	7E-08	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
44	2,2-BIS (PARA-	2.7E-10	3.8E-08	1.1E-08	NA		NA	NA	NA	NA		
45	2,2-BIS (PARA-	3.0E-10	3.6E-08	1.1E-08	NA		NA	NA	NA	NA		
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
47	ALPHA CHLORDAN	6.5E-11	2.9E-07	0.0E+00	NA		1E-06	5E-03	0E+00	NA		
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
49	BENZOIC ACID	1.6E-07	5.8E-07	2.1E-09	NA		4E-08	1E-07	5E-10	NA		
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
52	GAMMA-CHLORDAN	1.4E-10	7.0E-09	0.0E+00	NA		2E-06	1E-04	0E+00	NA		
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA		
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA		
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA		
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA		
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA		
						PATHWAY SUM (HI)	3E-05	5E-03	1E-05	0E+00	0E+00	0E+00
						POPULATION TOTAL	5E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP2
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

CURRENT
WADER (HR)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 HOLMES RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 HOLMES RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 HOLMES RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 HOLMES RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	2.5E-07	1.3E-07	1.8E-07	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.1E-08	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	3.3E-08	1.6E-08	0.0E+00	0.0E+00		
6	CHROMIUM	4.8E-08	2.4E-08	7.0E-08	NA		
7	MERCURY	2.4E-09	1.2E-09	5.7E-10	NA		
8	NICKEL	2.0E-07	1.0E-07	0.0E+00	NA		
9	NITRATE	1.4E-05	7.2E-06	0.0E+00	NA		
10	NITRITE	3.5E-08	1.8E-08	0.0E+00	NA		
11	SILVER	1.6E-09	8.0E-10	6.6E-09	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	3.2E-08	9.1E-09	7.8E-09	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	2.1E-09	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	2.1E-09	NA		
28	BENZO (a) ANTH	0.0E+00	0.0E+00	9.1E-09	NA		
29	BENZO (a) PYRE	0.0E+00	0.0E+00	7.8E-09	NA		
30	BENZO (b) FLUO	0.0E+00	0.0E+00	7.3E-09	NA		
31	BENZO (g,h,i)	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO (k) FLUO	0.0E+00	0.0E+00	7.8E-09	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	2.1E-09	NA		
34	CHRYSENE	0.0E+00	0.0E+00	1.1E-08	NA		
35	DIBENZ (a,h) A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	2.1E-08	NA		
37	FLUORENE	0.0E+00	0.0E+00	2.1E-09	NA		
38	INDENO (1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	2.1E-08	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	2.0E-08	NA		

CHRONIC RISK SUMMARY

CURRENT
WADER (HR)

CHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 HOLMES RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 HOLMES RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 HOLMES RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 HOLMES RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	NA	0E+00	0E+00
2	BARIUM	4E-06	2E-05	3E-06	NA		
3	BERYLLIUM	0E+00	0E+00	2E-06	NA		
4	CADMIUM (FOOD)	0E+00	0E+00	0E+00	0E+00		
5	CADMIUM (WATER	3E-05	3E-04	0E+00	0E+00		
6	CHROMIUM	1E-05	1E-04	1E-05	NA		
7	MERCURY	8E-06	2E-05	2E-06	NA		
8	NICKEL	1E-05	1E-04	0E+00	NA		
9	NITRATE	9E-06	NA	0E+00	NA		
10	NITRITE	4E-07	NA	0E+00	NA		
11	SILVER	3E-07	5E-07	1E-06	NA		
12	THALLIUM	0E+00	0E+00	0E+00	NA		
13	VANADIUM	0E+00	0E+00	0E+00	NA		
14	ACETONE	3E-07	9E-08	8E-08	NA		
15	BENZENE	NA	NA	NA	NA		
16	CARBON DISULFI	0E+00	0E+00	0E+00	NA		
17	ETHYLBENZENE	0E+00	0E+00	0E+00	NA		
18	METHYLISOBUTYL	0E+00	0E+00	0E+00	NA		
19	TOLUENE	0E+00	0E+00	0E+00	NA		
20	XYLENES, TOTAL	0E+00	0E+00	0E+00	NA		
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	NA		
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	NA		
23	2,4-DIMETHYLPH	0E+00	0E+00	0E+00	NA		
24	2-METHYLNAPHTH	0E+00	NA	0E+00	NA		
25	2-METHYLPHENOL	0E+00	0E+00	0E+00	NA		
26	ACENAPHTHENE	0E+00	NA	4E-08	NA		
27	ANTHRACENE	0E+00	NA	7E-09	NA		
28	BENZO (a) ANTH	0E+00	NA	3E-07	NA		
29	BENZO (a) PYRE	0E+00	NA	3E-07	NA		
30	BENZO (b) FLUO	0E+00	NA	2E-07	NA		
31	BENZO (g,h,i)	0E+00	NA	0E+00	NA		
32	BENZO (k) FLUO	0E+00	NA	3E-07	NA		
33	BIS (2-ETHYLHE	0E+00	0E+00	1E-07	NA		
34	CHRYSENE	0E+00	NA	4E-07	NA		
35	DIBENZ (a,h) A	0E+00	NA	0E+00	NA		
36	FLUORANTHENE	0E+00	NA	5E-07	NA		
37	FLUORENE	0E+00	NA	5E-08	NA		
38	INDENO (1,2,3-	0E+00	NA	0E+00	NA		
39	NAPHTHALENE	0E+00	NA	0E+00	NA		
40	PHENANTHRENE	0E+00	NA	7E-07	NA		
41	PHENOL	0E+00	0E+00	0E+00	NA		
42	PYRENE	0E+00	NA	7E-07	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44	2,2-BIS (PARA-	2.7E-10	3.8E-08	1.1E-08	NA		NA	NA	NA	NA	
45	2,2-BIS (PARA-	3.0E-10	3.6E-08	1.1E-08	NA		NA	NA	NA	NA	
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47	ALPHA CHLORDAN	6.5E-11	2.9E-07	0.0E+00	NA		1E-06	5E-03	0E+00	NA	
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
49	BENZOIC ACID	1.6E-07	5.8E-07	2.1E-09	NA		4E-08	1E-07	5E-10	NA	
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52	GAMMA-CHLORDAN	1.4E-10	7.0E-09	0.0E+00	NA		2E-06	1E-04	0E+00	NA	
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA	
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	

PATHWAY SUM (HI)	8E-05	6E-03	2E-05	0E+00	0E+00	0E+00
POPULATION TOTAL	6E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP2
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

CURRENT
WADER (HR)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 HOLMES RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 HOLMES RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 HOLMES RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 HOLMES RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	2.2E-08	1.1E-08	1.5E-08	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	9.6E-10	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	2.8E-09	1.4E-09	0.0E+00	0.0E+00		
6	CHROMIUM	4.1E-09	2.0E-09	6.0E-09	NA		
7	MERCURY	2.0E-10	1.00E-10	4.8E-11	NA		
8	NICKEL	1.7E-08	8.5E-09	0.0E+00	NA		
9	NITRATE	1.2E-06	6.1E-07	0.0E+00	NA		
10	NITRITE	3.0E-09	1.5E-09	0.0E+00	NA		
11	SILVER	1.4E-10	6.8E-11	5.6E-10	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	2.8E-09	7.7E-10	6.6E-10	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	1.8E-10	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	1.8E-10	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	7.7E-10	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	6.6E-10	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	6.2E-10	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	6.6E-10	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	1.8E-10	NA		
34	CHRYSENE	0.0E+00	0.0E+00	9.4E-10	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	1.8E-09	NA		
37	FLUORENE	0.0E+00	0.0E+00	1.8E-10	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	1.8E-09	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	1.7E-09	NA		

LIFETIME RISK SUMMARY

CURRENT
WADER (HR)

LIFETIME EXCESS CANCER RISK

SCENARIO 1 HOLMES RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 HOLMES RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 HOLMES RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 HOLMES RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
NA	NA	NA	NA		
0E+00	0E+00	4E-09	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	NA	4E-10	NA		
0E+00	NA	4E-09	NA		
0E+00	NA	4E-10	NA		
NA	NA	NA	NA		
0E+00	NA	4E-10	NA		
0E+00	0E+00	3E-12	NA		
0E+00	NA	5E-11	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		

43 2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44 2,2-BIS (PARA-	2.3E-11	3.2E-09	9.4E-10	NA		8E-12	1E-09	3E-10	NA	
45 2,2-BIS (PARA-	2.6E-11	3.1E-09	9.4E-10	NA		6E-12	7E-10	2E-10	NA	
46 ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47 ALPHA CHLORDAN	5.6E-12	2.4E-08	0.0E+00	NA		7E-12	3E-08	0E+00	NA	
48 BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
49 BENZOIC ACID	1.4E-08	4.9E-08	1.8E-10	NA		NA	NA	NA	NA	
50 BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
51 DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52 GAMMA-CHLORDAN	1.2E-11	5.9E-10	0.0E+00	NA		2E-11	8E-10	0E+00	NA	
53 HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54 HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
55 LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56 METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
57 PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00	
58 2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		NA	NA	NA	NA	
59 2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
60 2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		NA	NA	NA	NA	
61 TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
					TOTAL PATHWAY CANCER RISK	4E-11	3E-08	1E-08	0E+00	0E+00	0E+00
					POPULATION TOTAL EXCESS RISK	4E-08					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP3
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

CURRENT
WADER (CR)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAMERON RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 CAMERON RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 CAMERON RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 CAMERON RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	3.5E-07	1.7E-07	1.1E-07	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.6E-09	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	1.6E-08	8.0E-09	0.0E+00	0.0E+00		
6	CHROMIUM	4.8E-08	2.4E-08	7.0E-08	NA		
7	MERCURY	2.4E-09	1.2E-09	5.7E-10	NA		
8	NICKEL	2.0E-07	1.0E-07	0.0E+00	NA		
9	NITRATE	6.4E-06	3.2E-06	0.0E+00	NA		
10	NITRITE	9.0E-07	4.5E-07	0.0E+00	NA		
11	SILVER	4.4E-09	2.2E-09	6.6E-09	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	3.2E-08	9.1E-09	2.5E-08	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	0.0E+00	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	0.0E+00	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	0.0E+00	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	2.1E-09	NA		
34	CHRYSENE	0.0E+00	0.0E+00	0.0E+00	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
37	FLUORENE	0.0E+00	0.0E+00	0.0E+00	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	0.0E+00	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	0.0E+00	NA		

SUBCHRONIC RISK SUMMARY

CURRENT
WADER (CR)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 CAMERON RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 CAMERON RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 CAMERON RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 CAMERON RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
5E-06	2E-05	2E-06	NA		
0E+00	0E+00	3E-07	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
2E-06	2E-05	3E-06	NA		
8E-06	2E-05	2E-06	NA		
1E-05	1E-04	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
9E-07	1E-06	1E-06	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
3E-08	9E-09	3E-08	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	1E-07	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44	2,2-BIS (PARA-	2.7E-10	3.8E-08	1.1E-08	NA		NA	NA	NA	NA	
45	2,2-BIS (PARA-	3.0E-10	3.6E-08	1.1E-08	NA		NA	NA	NA	NA	
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47	ALPHA CHLORDAN	6.5E-11	2.9E-07	0.0E+00	NA		1E-06	5E-03	0E+00	NA	
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
49	BENZOIC ACID	1.6E-07	5.8E-07	2.1E-09	NA		4E-08	1E-07	5E-10	NA	
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52	GAMMA-CHLORDAN	1.4E-10	7.0E-09	0.0E+00	NA		2E-06	1E-04	0E+00	NA	
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		NA	NA	NA	NA	
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		0E+00	NA	0E+00	NA	
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	

PATHWAY SUM (HI)	3E-05	5E-03	8E-06	0E+00	0E+00	0E+00
POPULATION TOTAL	5E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP3
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

CURRENT
WADER (CR)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAMERON RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 CAMERON RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 CAMERON RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 CAMERON RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	3.5E-07	1.7E-07	1.1E-07	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.6E-09	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	1.6E-08	8.0E-09	0.0E+00	0.0E+00		
6	CHROMIUM	4.8E-08	2.4E-08	7.0E-08	NA		
7	MERCURY	2.4E-09	1.2E-09	5.7E-10	NA		
8	NICKEL	2.0E-07	1.0E-07	0.0E+00	NA		
9	NITRATE	6.4E-06	3.2E-06	0.0E+00	NA		
10	NITRITE	9.0E-07	4.5E-07	0.0E+00	NA		
11	SILVER	4.4E-09	2.2E-09	6.6E-09	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	3.2E-08	9.1E-09	2.5E-08	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	0.0E+00	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	0.0E+00	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	0.0E+00	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	2.1E-09	NA		
34	CHRYSENE	0.0E+00	0.0E+00	0.0E+00	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
37	FLUORENE	0.0E+00	0.0E+00	0.0E+00	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	0.0E+00	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	0.0E+00	NA		

CHRONIC RISK SUMMARY

CURRENT
WADER (CR)

CHRONIC HAZARD QUOTIENT

SCENARIO 1 CAMERON RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 CAMERON RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 CAMERON RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 CAMERON RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
5E-06	2E-05	2E-06	NA		
0E+00	0E+00	3E-07	NA		
0E+00	0E+00	0E+00	0E+00		
2E-05	1E-04	0E+00	0E+00		
1E-05	1E-04	1E-05	NA		
8E-06	2E-05	2E-06	NA		
1E-05	1E-04	0E+00	NA		
4E-06	NA	0E+00	NA		
9E-06	NA	0E+00	NA		
9E-07	1E-06	1E-06	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
3E-07	9E-08	3E-07	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	1E-07	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	0E+00	NA		
0E+00	NA	0E+00	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
44	2,2-BIS (PARA-	2.7E-10	3.8E-08	1.1E-08	NA			NA	NA	NA	NA	
45	2,2-BIS (PARA-	3.0E-10	3.6E-08	1.1E-08	NA			NA	NA	NA	NA	
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
47	ALPHA CHLORDAN	6.5E-11	2.9E-07	0.0E+00	NA			1E-06	5E-03	0E+00	NA	
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
49	BENZOIC ACID	1.6E-07	5.8E-07	2.1E-09	NA			4E-08	1E-07	5E-10	NA	
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
52	GAMMA-CHLORDAN	1.4E-10	7.0E-09	0.0E+00	NA			2E-06	1E-04	0E+00	NA	
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00			NA	NA	NA	NA	
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA			0E+00	NA	0E+00	NA	
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA			0E+00	NA	0E+00	NA	
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA			0E+00	0E+00	0E+00	NA	
						PATHWAY SUM (HI)		7E-05	5E-03	2E-05	0E+00	0E+00	0E+00
						POPULATION TOTAL		5E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 4
FILE NAME: POP3
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

CURRENT
WADER (CR)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAMERON RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 CAMERON RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 CAMERON RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 CAMERON RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 (FROM WS5)	SCENARIO 6 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	0.0E+00
2	BARIUM	3.0E-08	1.5E-08	9.3E-09	NA		
3	BERYLLIUM	0.0E+00	0.0E+00	1.4E-10	NA		
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00		
5	CADMIUM (WATER	1.4E-09	6.8E-10	0.0E+00	0.0E+00		
6	CHROMIUM	4.1E-09	2.0E-09	5.9E-09	NA		
7	MERCURY	2.0E-10	1.00E-10	4.8E-11	NA		
8	NICKEL	1.7E-08	8.5E-09	0.0E+00	NA		
9	NITRATE	5.5E-07	2.7E-07	0.0E+00	NA		
10	NITRITE	7.8E-08	3.8E-08	0.0E+00	NA		
11	SILVER	3.8E-10	1.9E-10	5.6E-10	NA		
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	NA		
13	VANADIUM	0.0E+00	0.0E+00	0.0E+00	NA		
14	ACETONE	2.8E-09	7.7E-10	2.1E-09	NA		
15	BENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	NA		
17	ETHYLBENZENE	0.0E+00	0.0E+00	0.0E+00	NA		
18	METHYLISOBUTYL	0.0E+00	0.0E+00	0.0E+00	NA		
19	TOLUENE	0.0E+00	0.0E+00	0.0E+00	NA		
20	XYLENES, TOTAL	0.0E+00	0.0E+00	0.0E+00	NA		
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	NA		
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	NA		
24	2-METHYLNAPHTH	0.0E+00	0.0E+00	0.0E+00	NA		
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
26	ACENAPHTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
27	ANTHRACENE	0.0E+00	0.0E+00	0.0E+00	NA		
28	BENZO [a] ANTH	0.0E+00	0.0E+00	0.0E+00	NA		
29	BENZO [a] PYRE	0.0E+00	0.0E+00	0.0E+00	NA		
30	BENZO [b] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
31	BENZO [g,h,i]	0.0E+00	0.0E+00	0.0E+00	NA		
32	BENZO [k] FLUO	0.0E+00	0.0E+00	0.0E+00	NA		
33	BIS (2-ETHYLHE	0.0E+00	0.0E+00	1.8E-10	NA		
34	CHRYSENE	0.0E+00	0.0E+00	0.0E+00	NA		
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	NA		
36	FLUORANTHENE	0.0E+00	0.0E+00	0.0E+00	NA		
37	FLUORENE	0.0E+00	0.0E+00	0.0E+00	NA		
38	INDENO [1,2,3-	0.0E+00	0.0E+00	0.0E+00	NA		
39	NAPHTHALENE	0.0E+00	0.0E+00	0.0E+00	NA		
40	PHENANTHRENE	0.0E+00	0.0E+00	0.0E+00	NA		
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	NA		
42	PYRENE	0.0E+00	0.0E+00	0.0E+00	NA		

LIFETIME RISK SUMMARY

CURRENT
WADER (CR)

LIFETIME EXCESS CANCER RISK

SCENARIO 1 CAMERON RUN SURFACE WAT ORAL (FROM WS1)	SCENARIO 2 CAMERON RUN SURFACE WAT DERMAL (FROM WS2)	SCENARIO 3 CAMERON RUN SEDIMENT ORAL (FROM WS3)	SCENARIO 4 CAMERON RUN SEDIMENT DERMAL (FROM WS4)	SCENARIO 5 0 0 (FROM WS5)	SCENARIO 6 0 0 (FROM WS6)
0E+00	0E+00	0E+00	NA	0E+00	0E+00
NA	NA	NA	NA		
0E+00	0E+00	6E-10	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	0E+00	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
0E+00	0E+00	3E-12	NA		
0E+00	NA	0E+00	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
0E+00	NA	0E+00	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		
NA	NA	NA	NA		

43	2,2-BIS (PARA-	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
44	2,2-BIS (PARA-	2.3E-11	3.2E-09	9.4E-10	NA		8E-12	1E-09	3E-10	NA	
45	2,2-BIS (PARA-	2.6E-11	3.1E-09	9.4E-10	NA		6E-12	7E-10	2E-10	NA	
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
47	ALPHA CHLORDAN	5.6E-12	2.4E-08	0.0E+00	NA		7E-12	3E-08	0E+00	NA	
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
49	BENZOIC ACID	1.4E-08	4.9E-08	1.8E-10	NA		NA	NA	NA	NA	
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
51	DIELDRIN	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
52	GAMMA-CHLORDAN	1.2E-11	5.9E-10	0.0E+00	NA		2E-11	8E-10	0E+00	NA	
53	HEPTACHLOR	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
54	HEPTACHLOR EPO	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	NA		0E+00	0E+00	0E+00	NA	
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
57	PCB 1260	0.0E+00	0.0E+00	0.0E+00	0.0E+00		0E+00	0E+00	0E+00	0E+00	
58	2,4,5-TRICHLOR	0.0E+00	NA	0.0E+00	NA		NA	NA	NA	NA	
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	
60	2-(2,4,5-TRICH	0.0E+00	NA	0.0E+00	NA		NA	NA	NA	NA	
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	NA		NA	NA	NA	NA	

TOTAL PATHWAY CANCER RISK	4E-11	3E-08	1E-09	0E+00	0E+00	0E+00

POPULATION TOTAL EXCESS RISK 3E-08

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP1
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (CL)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.5E-07	NA
2	BARIUM	5.8E-10	0.0E+00	5.3E-07	4.7E-08	2.5E-06	NA
3	BERYLLIUM	9.3E-12	0.0E+00	0.0E+00	0.0E+00	2.2E-07	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-08	8.0E-09
5	CADMIUM (WATER	0.0E+00	0.0E+00	8.0E-08	7.1E-09	0.0E+00	0.0E+00
6	CHROMIUM	1.1E-10	0.0E+00	1.4E-07	1.2E-08	1.7E-06	NA
7	MERCURY	0.0E+00	0.0E+00	6.7E-09	5.9E-10	1.6E-09	NA
8	NICKEL	2.6E-11	0.0E+00	5.7E-07	5.0E-08	2.9E-07	NA
9	NITRATE	0.0E+00	0.0E+00	8.7E-06	7.7E-07	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	9.9E-08	8.8E-09	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	8.8E-09	7.8E-10	1.9E-08	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	1.1E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
14	ACETONE	4.2E-12	9.0E-17	9.0E-08	4.6E-09	2.2E-08	NA
15	BENZENE	4.2E-12	6.3E-19	0.0E+00	0.0E+00	0.0E+00	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	4.2E-12	2.9E-20	0.0E+00	0.0E+00	0.0E+00	NA
18	METHYLISOBUTYL	4.2E-12	1.2E-20	0.0E+00	0.0E+00	0.0E+00	NA
19	TOLUENE	4.2E-12	1.2E-19	0.0E+00	0.0E+00	0.0E+00	NA
20	XYLENES, TOTAL	4.2E-12	4.2E-19	0.0E+00	0.0E+00	0.0E+00	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.3E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.1E-08	NA
27	ANTHRACENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.4E-08	NA
28	BENZO [a] ANTH	1.5E-11	0.0E+00	0.0E+00	0.0E+00	3.1E-08	NA
29	BENZO [a] PYRE	6.0E-12	0.0E+00	0.0E+00	0.0E+00	2.6E-08	NA
30	BENZO [b] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.4E-08	NA
31	BENZO [g,h,i]	2.9E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.2E-08	NA
33	BIS (2-ETHYLHE	2.3E-12	0.0E+00	1.5E-07	4.5E-07	3.8E-08	NA
34	CHRYSENE	7.5E-12	0.0E+00	0.0E+00	0.0E+00	3.7E-08	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	6.8E-08	NA
37	FLUORENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
38	INDENO [1,2,3-	3.6E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
39	NAPHTHALENE	2.3E-12	1.1E-21	0.0E+00	0.0E+00	0.0E+00	NA
40	PHENANTHRENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	5.6E-08	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.5E-11	0.0E+00	0.0E+00	0.0E+00	6.7E-08	NA

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD (CL)

SUBCHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	NA	NA	0E+00	0E+00	2E-03	NA
2	BARIUM	6E-07	0E+00	8E-06	7E-06	4E-05	NA
3	BERYLLIUM	NA	NA	0E+00	0E+00	4E-05	NA
4	CADMIUM (FOOD)	NA	NA	NA	NA	NA	NA
5	CADMIUM (WATER	NA	NA	NA	NA	NA	NA
6	CHROMIUM	2E-05	0E+00	7E-06	1E-05	9E-05	NA
7	MERCURY	0E+00	0E+00	2E-05	1E-05	5E-06	NA
8	NICKEL	NA	NA	3E-05	5E-05	1E-05	NA
9	NITRATE	NA	NA	NA	NA	NA	NA
10	NITRITE	NA	NA	NA	NA	NA	NA
11	SILVER	NA	NA	2E-06	5E-07	4E-06	NA
12	THALLIUM	NA	NA	0E+00	0E+00	0E+00	NA
13	VANADIUM	NA	NA	0E+00	0E+00	0E+00	NA
14	ACETONE	NA	NA	9E-08	5E-09	2E-08	NA
15	BENZENE	NA	NA	NA	NA	NA	NA
16	CARBON DISULFI	0E+00	0E+00	0E+00	0E+00	0E+00	NA
17	ETHYLBENZENE	1E-11	0E+00	0E+00	0E+00	0E+00	NA
18	METHYLISOBUTYL	2E-11	0E+00	0E+00	0E+00	0E+00	NA
19	TOLUENE	7E-12	0E+00	0E+00	0E+00	0E+00	NA
20	XYLENES, TOTAL	5E-11	0E+00	0E+00	0E+00	0E+00	NA
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
23	2,4-DIMETHYLPH	NA	NA	0E+00	0E+00	0E+00	NA
24	2-METHYLNAPHTH	NA	NA	0E+00	NA	0E+00	NA
25	2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
26	ACENAPHTHENE	NA	NA	0E+00	NA	2E-08	NA
27	ANTHRACENE	NA	NA	0E+00	NA	5E-09	NA
28	BENZO [a] ANTH	NA	NA	0E+00	NA	1E-07	NA
29	BENZO [a] PYRE	NA	NA	0E+00	NA	9E-08	NA
30	BENZO [b] FLUO	NA	NA	0E+00	NA	1E-07	NA
31	BENZO [g,h,i]	NA	NA	0E+00	NA	0E+00	NA
32	BENZO [k] FLUO	NA	NA	0E+00	NA	1E-07	NA
33	BIS (2-ETHYLHE	NA	NA	8E-06	2E-05	2E-06	NA
34	CHRYSENE	NA	NA	0E+00	NA	1E-07	NA
35	DIBENZ [a,h] A	NA	NA	0E+00	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	0E+00	NA	2E-07	NA
37	FLUORENE	NA	NA	0E+00	NA	3E-08	NA
38	INDENO [1,2,3-	NA	NA	0E+00	NA	4E-08	NA
39	NAPHTHALENE	NA	NA	0E+00	NA	0E+00	NA
40	PHENANTHRENE	NA	NA	0E+00	NA	2E-07	NA
41	PHENOL	NA	NA	0E+00	0E+00	0E+00	NA
42	PYRENE	NA	NA	0E+00	NA	2E-07	NA

43 2,2-BIS (PARA-	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
44 2,2-BIS (PARA-	1.2E-11	0.0E+00	7.6E-10	1.9E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
45 2,2-BIS (PARA-	1.2E-11	0.0E+00	8.5E-10	1.8E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
46 ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
47 ALPHA CHLORDAN	0.0E+00	0.0E+00	1.8E-10	1.4E-07	0.0E+00	NA	NA	NA	3E-06	2E-03	0E+00	NA
48 BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
49 BENZOIC ACID	0.0E+00	0.0E+00	3.2E-07	2.1E-07	1.3E-08	NA	NA	NA	8E-08	5E-08	3E-09	NA
50 BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
51 DIELDRIN	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
52 GAMMA-CHLORDAN	0.0E+00	0.0E+00	4.1E-10	3.5E-09	0.0E+00	NA	NA	NA	7E-06	6E-05	0E+00	NA
53 HEPTACHLOR	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
54 HEPTACHLOR EPO	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
55 LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
56 METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
57 PCB 1260	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA
58 2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
59 2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
60 2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
61 TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
					PATHWAY SUM (HI)		2E-05	0E+00	9E-05	2E-03	2E-03	0E+00
					POPULATION TOTAL		4E-03					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP1
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (CL)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	4.5E-07	NA
2	BARIUM	5.8E-10	0.0E+00	5.3E-07	4.7E-08	2.5E-06	NA
3	BERYLLIUM	9.3E-12	0.0E+00	0.0E+00	0.0E+00	2.2E-07	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.8E-08	8.0E-09
5	CADMIUM (WATER	0.0E+00	0.0E+00	8.0E-08	7.1E-09	0.0E+00	0.0E+00
6	CHROMIUM	1.1E-10	0.0E+00	1.4E-07	1.2E-08	1.7E-06	NA
7	MERCURY	0.0E+00	0.0E+00	6.7E-09	5.9E-10	1.6E-09	NA
8	NICKEL	2.6E-11	0.0E+00	5.7E-07	5.0E-08	2.9E-07	NA
9	NITRATE	0.0E+00	0.0E+00	8.7E-06	7.7E-07	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	9.9E-08	8.8E-09	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	8.8E-09	7.8E-10	1.9E-08	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	1.1E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
14	ACETONE	4.2E-12	9.0E-17	9.0E-08	4.6E-09	2.2E-08	NA
15	BENZENE	4.2E-12	6.3E-19	0.0E+00	0.0E+00	0.0E+00	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	4.2E-12	2.9E-20	0.0E+00	0.0E+00	0.0E+00	NA
18	METHYLISOBUTYL	4.2E-12	1.2E-20	0.0E+00	0.0E+00	0.0E+00	NA
19	TOLUENE	4.2E-12	1.2E-19	0.0E+00	0.0E+00	0.0E+00	NA
20	XYLENES, TOTAL	4.2E-12	4.2E-19	0.0E+00	0.0E+00	0.0E+00	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.3E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.1E-08	NA
27	ANTHRACENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.4E-08	NA
28	BENZO [a] ANTH	1.5E-11	0.0E+00	0.0E+00	0.0E+00	3.1E-08	NA
29	BENZO [a] PYRE	6.0E-12	0.0E+00	0.0E+00	0.0E+00	2.6E-08	NA
30	BENZO [b] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.4E-08	NA
31	BENZO [g,h,i]	2.9E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	6.0E-12	0.0E+00	0.0E+00	0.0E+00	3.2E-08	NA
33	BIS (2-ETHYLHE	2.3E-12	0.0E+00	1.5E-07	4.5E-07	3.8E-08	NA
34	CHRYSENE	7.5E-12	0.0E+00	0.0E+00	0.0E+00	3.7E-08	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	6.8E-08	NA
37	FLUORENE	2.3E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
38	INDENO [1,2,3-	3.6E-12	0.0E+00	0.0E+00	0.0E+00	1.2E-08	NA
39	NAPHTHALENE	2.3E-12	1.1E-21	0.0E+00	0.0E+00	0.0E+00	NA
40	PHENANTHRENE	1.3E-11	0.0E+00	0.0E+00	0.0E+00	5.6E-08	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.5E-11	0.0E+00	0.0E+00	0.0E+00	6.7E-08	NA

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD (CL)

CHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	NA	NA	0E+00	0E+00	2E-03	NA
2	BARIUM	6E-06	0E+00	8E-06	7E-06	4E-05	NA
3	BERYLLIUM	NA	NA	0E+00	0E+00	4E-05	NA
4	CADMIUM (FOOD)	NA	NA	0E+00	0E+00	4E-05	3E-04
5	CADMIUM (WATER	NA	NA	8E-05	1E-04	0E+00	0E+00
6	CHROMIUM	2E-04	0E+00	3E-05	5E-05	3E-04	NA
7	MERCURY	0E+00	0E+00	2E-05	1E-05	5E-06	NA
8	NICKEL	NA	NA	3E-05	5E-05	1E-05	NA
9	NITRATE	NA	NA	5E-06	NA	0E+00	NA
10	NITRITE	NA	NA	1E-06	NA	0E+00	NA
11	SILVER	NA	NA	2E-06	5E-07	4E-06	NA
12	THALLIUM	NA	NA	0E+00	0E+00	0E+00	NA
13	VANADIUM	NA	NA	0E+00	0E+00	0E+00	NA
14	ACETONE	NA	NA	9E-07	5E-08	2E-07	NA
15	BENZENE	NA	NA	NA	NA	NA	NA
16	CARBON DISULFI	0E+00	0E+00	0E+00	0E+00	0E+00	NA
17	ETHYLBENZENE	1E-11	0E+00	0E+00	0E+00	0E+00	NA
18	METHYLISOBUTYL	2E-10	0E+00	0E+00	0E+00	0E+00	NA
19	TOLUENE	7E-12	0E+00	0E+00	0E+00	0E+00	NA
20	XYLENES, TOTAL	5E-11	0E+00	0E+00	0E+00	0E+00	NA
21	1,2-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
22	1,3-DIMETHYLBE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
23	2,4-DIMETHYLPH	NA	NA	0E+00	0E+00	0E+00	NA
24	2-METHYLNAPHTH	NA	NA	0E+00	NA	0E+00	NA
25	2-METHYLPHENOL	NA	NA	0E+00	0E+00	0E+00	NA
26	ACENAPHTHENE	NA	NA	0E+00	NA	2E-07	NA
27	ANTHRACENE	NA	NA	0E+00	NA	5E-08	NA
28	BENZO [a] ANTH	NA	NA	0E+00	NA	1E-06	NA
29	BENZO [a] PYRE	NA	NA	0E+00	NA	9E-07	NA
30	BENZO [b] FLUO	NA	NA	0E+00	NA	1E-06	NA
31	BENZO [g,h,i]	NA	NA	0E+00	NA	0E+00	NA
32	BENZO [k] FLUO	NA	NA	0E+00	NA	1E-06	NA
33	BIS (2-ETHYLHE	NA	NA	8E-06	2E-05	2E-06	NA
34	CHRYSENE	NA	NA	0E+00	NA	1E-06	NA
35	DIBENZ [a,h] A	NA	NA	0E+00	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	0E+00	NA	2E-06	NA
37	FLUORENE	NA	NA	0E+00	NA	3E-07	NA
38	INDENO [1,2,3-	NA	NA	0E+00	NA	4E-07	NA
39	NAPHTHALENE	NA	NA	0E+00	NA	0E+00	NA
40	PHENANTHRENE	NA	NA	0E+00	NA	2E-06	NA
41	PHENOL	NA	NA	0E+00	0E+00	0E+00	NA
42	PYRENE	NA	NA	0E+00	NA	2E-06	NA

43	2,2-BIS (PARA-	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
44	2,2-BIS (PARA-	1.2E-11	0.0E+00	7.6E-10	1.9E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
45	2,2-BIS (PARA-	1.2E-11	0.0E+00	8.5E-10	1.8E-08	3.1E-08	NA	NA	NA	NA	NA	NA	NA
46	ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
47	ALPHA CHLORDAN	0.0E+00	0.0E+00	1.8E-10	1.4E-07	0.0E+00	NA	NA	NA	3E-06	2E-03	0E+00	NA
48	BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
49	BENZOIC ACID	0.0E+00	0.0E+00	3.2E-07	2.1E-07	1.3E-08	NA	NA	NA	8E-08	5E-08	3E-09	NA
50	BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
51	DIELDRIN	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
52	GAMMA-CHLORDAN	0.0E+00	0.0E+00	4.1E-10	3.5E-09	0.0E+00	NA	NA	NA	7E-06	6E-05	0E+00	NA
53	HEPTACHLOR	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
54	HEPTACHLOR EPO	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
55	LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
56	METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
57	PCB 1260	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA
58	2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
59	2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
60	2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	0E+00	NA	0E+00	NA
61	TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
							PATHWAY SUM (HI)	2E-04	0E+00	2E-04	2E-03	2E-03	3E-04
							POPULATION TOTAL	5E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP1
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-CHILD (CL)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3.8E-08	NA
2	BARIUM	5.0E-11	0.0E+00	4.7E-08	4.1E-09	2.1E-07	NA
3	BERYLLIUM	8.1E-13	0.0E+00	0.0E+00	0.0E+00	1.8E-08	NA
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00	0.0E+00	1.5E-09	7.0E-10
5	CADMIUM (WATER	0.0E+00	0.0E+00	7.1E-09	6.2E-10	0.0E+00	0.0E+00
6	CHROMIUM	9.2E-12	0.0E+00	1.2E-08	1.1E-09	1.5E-07	NA
7	MERCURY	0.0E+00	0.0E+00	5.9E-10	5.2E-11	1.3E-10	NA
8	NICKEL	2.3E-12	0.0E+00	5.0E-08	4.4E-09	2.4E-08	NA
9	NITRATE	0.0E+00	0.0E+00	7.7E-07	6.8E-08	0.0E+00	NA
10	NITRITE	0.0E+00	0.0E+00	8.8E-09	7.7E-10	0.0E+00	NA
11	SILVER	0.0E+00	0.0E+00	7.8E-10	6.8E-11	1.6E-09	NA
12	THALLIUM	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
13	VANADIUM	9.1E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
14	ACETONE	3.7E-13	7.8E-18	8.0E-09	4.0E-10	1.9E-09	NA
15	BENZENE	3.7E-13	5.5E-20	0.0E+00	0.0E+00	0.0E+00	NA
16	CARBON DISULFI	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
17	ETHYLBENZENE	3.7E-13	2.5E-21	0.0E+00	0.0E+00	0.0E+00	NA
18	METHYLISOBUTYL	3.7E-13	1.0E-21	0.0E+00	0.0E+00	0.0E+00	NA
19	TOLUENE	3.7E-13	1.0E-20	0.0E+00	0.0E+00	0.0E+00	NA
20	XYLENES, TOTAL	3.7E-13	3.6E-20	0.0E+00	0.0E+00	0.0E+00	NA
21	1,2-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
22	1,3-DIMETHYLBE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
23	2,4-DIMETHYLPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
24	2-METHYLNAPHTH	2.0E-13	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
25	2-METHYLPHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
26	ACENAPHTHENE	2.0E-13	0.0E+00	0.0E+00	0.0E+00	9.2E-10	NA
27	ANTHRACENE	2.0E-13	0.0E+00	0.0E+00	0.0E+00	1.2E-09	NA
28	BENZO [a] ANTH	1.3E-12	0.0E+00	0.0E+00	0.0E+00	2.6E-09	NA
29	BENZO [a] PYRE	5.2E-13	0.0E+00	0.0E+00	0.0E+00	2.2E-09	NA
30	BENZO [b] FLUO	5.2E-13	0.0E+00	0.0E+00	0.0E+00	2.8E-09	NA
31	BENZO [g,h,i]	2.5E-13	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
32	BENZO [k] FLUO	5.2E-13	0.0E+00	0.0E+00	0.0E+00	2.7E-09	NA
33	BIS (2-ETHYLHE	2.0E-13	0.0E+00	1.4E-08	3.9E-08	3.2E-09	NA
34	CHRYSENE	6.5E-13	0.0E+00	0.0E+00	0.0E+00	3.1E-09	NA
35	DIBENZ [a,h] A	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
36	FLUORANTHENE	1.2E-12	0.0E+00	0.0E+00	0.0E+00	5.7E-09	NA
37	FLUORENE	2.0E-13	0.0E+00	0.0E+00	0.0E+00	1.0E-09	NA
38	INDENO [1,2,3-	3.2E-13	0.0E+00	0.0E+00	0.0E+00	1.0E-09	NA
39	NAPHTHALENE	2.0E-13	9.2E-23	0.0E+00	0.0E+00	0.0E+00	NA
40	PHENANTHRENE	1.2E-12	0.0E+00	0.0E+00	0.0E+00	4.7E-09	NA
41	PHENOL	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA
42	PYRENE	1.3E-12	0.0E+00	0.0E+00	0.0E+00	5.6E-09	NA

LIFETIME RISK SUMMARY

FUTURE
RES-CHILD (CL)

LIFETIME EXCESS CANCER RISK

	CHEMICAL NAME	SCENARIO 1 CAM-LAKE AIR-PART INHALATION (FROM WS1)	SCENARIO 2 CAM-LAKE AIR-VOC INHALATION (FROM WS2)	SCENARIO 3 CAM-LAKE SURF WATER ORAL (FROM WS3)	SCENARIO 4 CAM-LAKE SURF WATER DERMAL (FROM WS4)	SCENARIO 5 CAM-LAKE SEDIMENT ORAL (FROM WS5)	SCENARIO 6 CAM-LAKE SEDIMENT DERMAL (FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	0E+00	7E-08	NA
2	BARIUM	NA	NA	NA	NA	NA	NA
3	BERYLLIUM	7E-12	0E+00	0E+00	0E+00	8E-08	NA
4	CADMIUM (FOOD)	0E+00	0E+00	NA	NA	NA	NA
5	CADMIUM (WATER	0E+00	0E+00	NA	NA	NA	NA
6	CHROMIUM	4E-10	0E+00	NA	NA	NA	NA
7	MERCURY	NA	NA	NA	NA	NA	NA
8	NICKEL	NA	NA	NA	NA	NA	NA
9	NITRATE	NA	NA	NA	NA	NA	NA
10	NITRITE	NA	NA	NA	NA	NA	NA
11	SILVER	NA	NA	NA	NA	NA	NA
12	THALLIUM	NA	NA	NA	NA	NA	NA
13	VANADIUM	NA	NA	NA	NA	NA	NA
14	ACETONE	NA	NA	NA	NA	NA	NA
15	BENZENE	0E+00	0E+00	0E+00	0E+00	0E+00	NA
16	CARBON DISULFI	NA	NA	NA	NA	NA	NA
17	ETHYLBENZENE	NA	NA	NA	NA	NA	NA
18	METHYLISOBUTYL	NA	NA	NA	NA	NA	NA
19	TOLUENE	NA	NA	NA	NA	NA	NA
20	XYLENES, TOTAL	NA	NA	NA	NA	NA	NA
21	1,2-DIMETHYLBE	NA	NA	NA	NA	NA	NA
22	1,3-DIMETHYLBE	NA	NA	NA	NA	NA	NA
23	2,4-DIMETHYLPH	NA	NA	NA	NA	NA	NA
24	2-METHYLNAPHTH	NA	NA	NA	NA	NA	NA
25	2-METHYLPHENOL	NA	NA	NA	NA	NA	NA
26	ACENAPHTHENE	NA	NA	NA	NA	NA	NA
27	ANTHRACENE	NA	NA	NA	NA	NA	NA
28	BENZO [a] ANTH	NA	NA	0E+00	NA	1E-09	NA
29	BENZO [a] PYRE	NA	NA	0E+00	NA	1E-08	NA
30	BENZO [b] FLUO	NA	NA	0E+00	NA	2E-09	NA
31	BENZO [g,h,i]	NA	NA	NA	NA	NA	NA
32	BENZO [k] FLUO	NA	NA	0E+00	NA	2E-09	NA
33	BIS (2-ETHYLHE	NA	NA	2E-10	5E-10	4E-11	NA
34	CHRYSENE	NA	NA	0E+00	NA	2E-10	NA
35	DIBENZ [a,h] A	NA	NA	0E+00	NA	0E+00	NA
36	FLUORANTHENE	NA	NA	NA	NA	NA	NA
37	FLUORENE	NA	NA	NA	NA	NA	NA
38	INDENO [1,2,3-	NA	NA	0E+00	NA	6E-10	NA
39	NAPHTHALENE	NA	NA	NA	NA	NA	NA
40	PHENANTHRENE	NA	NA	NA	NA	NA	NA
41	PHENOL	NA	NA	NA	NA	NA	NA
42	PYRENE	NA	NA	NA	NA	NA	NA

43 2,2-BIS (PARA-	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
44 2,2-BIS (PARA-	1.0E-12	0.0E+00	6.8E-11	1.7E-09	2.6E-09	NA	NA	NA	2E-11	6E-10	9E-10	NA
45 2,2-BIS (PARA-	1.0E-12	0.0E+00	7.6E-11	1.6E-09	2.6E-09	NA	NA	NA	2E-11	4E-10	6E-10	NA
46 ALDRIN	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00	NA
47 ALPHA CHLORDAN	0.0E+00	0.0E+00	1.6E-11	1.3E-08	0.0E+00	NA	0E+00	0E+00	2E-11	2E-08	0E+00	NA
48 BENZALDEHYDE	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
49 BENZOIC ACID	0.0E+00	0.0E+00	2.9E-08	1.8E-08	1.1E-09	NA	NA	NA	NA	NA	NA	NA
50 BETA-ENDOSULFA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
51 DIELDRIN	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	2E-11	0E+00	0E+00	0E+00	0E+00	NA
52 GAMMA-CHLORDAN	0.0E+00	0.0E+00	3.6E-11	3.1E-10	0.0E+00	NA	0E+00	0E+00	5E-11	4E-10	0E+00	NA
53 HEPTACHLOR	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	5E-12	0E+00	0E+00	0E+00	0E+00	NA
54 HEPTACHLOR EPO	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	9E-12	0E+00	0E+00	0E+00	0E+00	NA
55 LINDANE / GAMA	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	0E+00	0E+00	0E+00	NA
56 METHOXYCHLOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
57 PCB 1260	1.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	0E+00	0E+00	0E+00	0E+00
58 2,4,5-TRICHLOR	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	NA	NA
59 2,4-DICHLOROPH	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
60 2-(2,4,5-TRICH	0.0E+00	0.0E+00	0.0E+00	NA	0.0E+00	NA	NA	NA	NA	NA	NA	NA
61 TRICHLOROFLUOR	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	NA	NA	NA	NA	NA	NA
						TOTAL PATHWAY CANCER RISK	4E-10	0E+00	3E-10	2E-08	2E-07	0E+00
						POPULATION TOTAL EXCESS RISK	2E-07					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP2
LAST UPDATED: 06/09/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (B)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0
		ORAL	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	8.4E-04					
3	BERYLLIUM	0.0E+00					
4	CADMIUM (FOOD)	6.1E-05					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.8E-03					
7	MERCURY	1.5E-05					
8	NICKEL	1.2E-03					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	1.2E-05					
12	THALLIUM	0.0E+00					
13	VANADIUM	0.0E+00					
14	ACETONE	0.0E+00					
15	BENZENE	0.0E+00					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	0.0E+00					
18	METHYLISOBUTYL	0.0E+00					
19	TOLUENE	0.0E+00					
20	XYLENES, TOTAL	0.0E+00					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	0.0E+00					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	0.0E+00					
27	ANTHRACENE	0.0E+00					
28	BENZO [a] ANTH	0.0E+00					
29	BENZO [a] PYRE	0.0E+00					
30	BENZO [b] FLUO	0.0E+00					
31	BENZO [g,h,i]	0.0E+00					
32	BENZO [k] FLUO	0.0E+00					
33	BIS (2-ETHYLHE	0.0E+00					
34	CHRYSENE	0.0E+00					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	0.0E+00					
37	FLUORENE	0.0E+00					
38	INDENO [1,2,3-	0.0E+00					
39	NAPHTHALENE	0.0E+00					
40	PHENANTHRENE	0.0E+00					
41	PHENOL	0.0E+00					
42	PYRENE	0.0E+00					

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD (B)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
CAM-LAKE (B	0	0	0	0	0
FISH	0	0	0	0	0
ORAL	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
1E-02					
0E+00					
NA					
NA					
9E-02					
5E-02					
6E-02					
NA					
NA					
2E-03					
0E+00					
0E+00					
0E+00					
NA					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
NA					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					
0E+00					

43	2,2-BIS (PARA-	0.0E+00					0E+00
44	2,2-BIS (PARA-	3.1E-05					NA
45	2,2-BIS (PARA-	3.8E-05					NA
46	ALDRIN	0.0E+00					0E+00
47	ALPHA CHLORDAN	8.2E-06					1E-01
48	BENZALDEHYDE	0.0E+00					0E+00
49	BENZOIC ACID	0.0E+00					0E+00
50	BETA-ENDOSULFA	0.0E+00					0E+00
51	DIELDRIN	0.0E+00					0E+00
52	GAMMA-CHLORDAN	8.7E-06					1E-01
53	HEPTACHLOR	0.0E+00					0E+00
54	HEPTACHLOR EPO	0.0E+00					NA
55	LINDANE / GAMA	0.0E+00					0E+00
56	METHOXYCHLOR	0.0E+00					0E+00
57	PCB 1260	5.1E-05					NA
58	2,4,5-TRICHLOR	0.0E+00					0E+00
59	2,4-DICHLOROPH	0.0E+00					0E+00
60	2-(2,4,5-TRICH	0.0E+00					0E+00
61	TRICHLOROFLUOR	0.0E+00					0E+00
	PATHWAY SUM (HI)		4E-01	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		4E-01					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP2
LAST UPDATED: 06/09/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (B)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0
		ORAL	0	0	0	0	0
		(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	8.4E-04					
3	BERYLLIUM	0.0E+00					
4	CADMIUM (FOOD)	6.1E-05					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.8E-03					
7	MERCURY	1.5E-05					
8	NICKEL	1.2E-03					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	1.2E-05					
12	THALLIUM	0.0E+00					
13	VANADIUM	0.0E+00					
14	ACETONE	0.0E+00					
15	BENZENE	0.0E+00					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	0.0E+00					
18	METHYLISOBUTYL	0.0E+00					
19	TOLUENE	0.0E+00					
20	XYLENES, TOTAL	0.0E+00					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	0.0E+00					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	0.0E+00					
27	ANTHRACENE	0.0E+00					
28	BENZO [a] ANTH	0.0E+00					
29	BENZO [a] PYRE	0.0E+00					
30	BENZO [b] FLUO	0.0E+00					
31	BENZO [g,h,i]	0.0E+00					
32	BENZO [k] FLUO	0.0E+00					
33	BIS (2-ETHYLHE	0.0E+00					
34	CHRYSENE	0.0E+00					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	0.0E+00					
37	FLUORENE	0.0E+00					
38	INDENO [1,2,3-	0.0E+00					
39	NAPHTHALENE	0.0E+00					
40	PHENANTHRENE	0.0E+00					
41	PHENOL	0.0E+00					
42	PYRENE	0.0E+00					

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD (B)

CHRONIC HAZARD QUOTIENT

	CHEMICAL NAME	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0
		ORAL	0	0	0	0	0
		(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	1E-02					
3	BERYLLIUM	0E+00					
4	CADMIUM (FOOD)	1E-01					
5	CADMIUM (WATER	0E+00					
6	CHROMIUM	4E-01					
7	MERCURY	5E-02					
8	NICKEL	6E-02					
9	NITRATE	0E+00					
10	NITRITE	0E+00					
11	SILVER	2E-03					
12	THALLIUM	0E+00					
13	VANADIUM	0E+00					
14	ACETONE	0E+00					
15	BENZENE	NA					
16	CARBON DISULFI	0E+00					
17	ETHYLBENZENE	0E+00					
18	METHYLISOBUTYL	0E+00					
19	TOLUENE	0E+00					
20	XYLENES, TOTAL	0E+00					
21	1,2-DIMETHYLBE	0E+00					
22	1,3-DIMETHYLBE	0E+00					
23	2,4-DIMETHYLPH	0E+00					
24	2-METHYLNAPHTH	0E+00					
25	2-METHYLPHENOL	0E+00					
26	ACENAPHTHENE	0E+00					
27	ANTHRACENE	0E+00					
28	BENZO [a] ANTH	0E+00					
29	BENZO [a] PYRE	0E+00					
30	BENZO [b] FLUO	0E+00					
31	BENZO [g,h,i]	0E+00					
32	BENZO [k] FLUO	0E+00					
33	BIS (2-ETHYLHE	0E+00					
34	CHRYSENE	0E+00					
35	DIBENZ [a,h] A	0E+00					
36	FLUORANTHENE	0E+00					
37	FLUORENE	0E+00					
38	INDENO [1,2,3-	0E+00					
39	NAPHTHALENE	0E+00					
40	PHENANTHRENE	0E+00					
41	PHENOL	0E+00					
42	PYRENE	0E+00					

43	2,2-BIS (PARA-	0.0E+00				0E+00		
44	2,2-BIS (PARA-	3.1E-05				NA		
45	2,2-BIS (PARA-	3.8E-05				NA		
46	ALDRIN	0.0E+00				0E+00		
47	ALPHA CHLORDAN	8.2E-06				1E-01		
48	BENZALDEHYDE	0.0E+00				0E+00		
49	BENZOIC ACID	0.0E+00				0E+00		
50	BETA-ENDOSULFA	0.0E+00				0E+00		
51	DIELDRIN	0.0E+00				0E+00		
52	GAMMA-CHLORDAN	8.7E-06				1E-01		
53	HEPTACHLOR	0.0E+00				0E+00		
54	HEPTACHLOR EPO	0.0E+00				0E+00		
55	LINDANE / GAMA	0.0E+00				0E+00		
56	METHOXYCHLOR	0.0E+00				0E+00		
57	PCB 1260	5.1E-05				NA		
58	2,4,5-TRICHLOR	0.0E+00				0E+00		
59	2,4-DICHLOROPH	0.0E+00				0E+00		
60	2-(2,4,5-TRICH	0.0E+00				0E+00		
61	TRICHLOROFLUOR	0.0E+00				0E+00		
	PATHWAY SUM (HI)		8E-01	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		8E-01					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP2
LAST UPDATED: 06/09/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-CHILD (B)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		CAM-LAKE (B	0	0	0	0	0
		FISH	0	0	0	0	0
		ORAL	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	7.2E-05					
3	BERYLLIUM	0.0E+00					
4	CADMIUM (FOOD)	5.3E-06					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.6E-04					
7	MERCURY	1.3E-06					
8	NICKEL	9.9E-05					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	1.1E-06					
12	THALLIUM	0.0E+00					
13	VANADIUM	0.0E+00					
14	ACETONE	0.0E+00					
15	BENZENE	0.0E+00					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	0.0E+00					
18	METHYLISOBUTYL	0.0E+00					
19	TOLUENE	0.0E+00					
20	XYLENES, TOTAL	0.0E+00					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	0.0E+00					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	0.0E+00					
27	ANTHRACENE	0.0E+00					
28	BENZO (a) ANTH	0.0E+00					
29	BENZO (a) PYRE	0.0E+00					
30	BENZO (b) FLUO	0.0E+00					
31	BENZO (g,h,i)	0.0E+00					
32	BENZO (k) FLUO	0.0E+00					
33	BIS (2-ETHYLHE	0.0E+00					
34	CHRYSENE	0.0E+00					
35	DIBENZ (a,h) A	0.0E+00					
36	FLUORANTHENE	0.0E+00					
37	FLUORENE	0.0E+00					
38	INDENO (1,2,3-	0.0E+00					
39	NAPHTHALENE	0.0E+00					
40	PHENANTHRENE	0.0E+00					
41	PHENOL	0.0E+00					
42	PYRENE	0.0E+00					

LIFETIME RISK SUMMARY

FUTURE
RES-CHILD (B)

LIFETIME EXCESS CANCER RISK

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
CAM-LAKE (B	0	0	0	0	0
FISH	0	0	0	0	0
ORAL	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
NA					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
0E+00					
0E+00					
NA					
0E+00					
0E+00					
0E+00					
0E+00					
NA					
NA					
0E+00					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	0.0E+00				0E+00		
44	2,2-BIS (PARA-	2.7E-06				9E-07		
45	2,2-BIS (PARA-	3.3E-06				8E-07		
46	ALDRIN	0.0E+00				0E+00		
47	ALPHA CHLORDAN	7.1E-07				9E-07		
48	BENZALDEHYDE	0.0E+00				NA		
49	BENZOIC ACID	0.0E+00				NA		
50	BETA-ENDOSULFA	0.0E+00				NA		
51	DIELDRIN	0.0E+00				0E+00		
52	GAMMA-CHLORDAN	7.5E-07				1E-06		
53	HEPTACHLOR	0.0E+00				0E+00		
54	HEPTACHLOR EPO	0.0E+00				0E+00		
55	LINDANE / GAMA	0.0E+00				0E+00		
56	METHOXYCHLOR	0.0E+00				NA		
57	PCB 1260	4.4E-06				3E-05		
58	2,4,5-TRICHLOR	0.0E+00				NA		
59	2,4-DICHLOROPH	0.0E+00				NA		
60	2-(2,4,5-TRICH	0.0E+00				NA		
61	TRICHLOROFLUOR	0.0E+00				NA		
	TOTAL PATHWAY CANCER RISK					3E-05	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK					3E-05					

RANGE NAME: SSUH

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP3
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (PG)

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD (PG)

		SUBCHRONIC DAILY INTAKE (mg/kg/day)						SUBCHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0	PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0	AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0	INHALATION	0	0	0.	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	NA	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	5.0E-09						5E-06					
3	BERYLLIUM	5.2E-11						NA					
4	CADMIUM (FOOD)	0.0E+00						NA					
5	CADMIUM (WATER	0.0E+00						NA					
6	CHROMIUM	1.2E-09						2E-04					
7	MERCURY	0.0E+00						0E+00					
8	NICKEL	2.8E-10						NA					
9	NITRATE	0.0E+00						NA					
10	NITRITE	0.0E+00						NA					
11	SILVER	0.0E+00						NA					
12	THALLIUM	0.0E+00						NA					
13	VANADIUM	1.1E-09						NA					
14	ACETONE	4.5E-11						NA					
15	BENZENE	4.5E-11						NA					
16	CARBON DISULFI	0.0E+00						0E+00					
17	ETHYLBENZENE	4.5E-11						2E-10					
18	METHYLISOBUTYL	4.5E-11						2E-10					
19	TOLUENE	4.5E-11						8E-11					
20	XYLENES, TOTAL	4.5E-11						5E-10					
21	1,2-DIMETHYLBE	0.0E+00						0E+00					
22	1,3-DIMETHYLBE	0.0E+00						0E+00					
23	2,4-DIMETHYLPH	0.0E+00						NA					
24	2-METHYLNAPHTH	1.2E-11						NA					
25	2-METHYLPHENOL	0.0E+00						NA					
26	ACENAPHTHENE	4.0E-11						NA					
27	ANTHRACENE	5.9E-11						NA					
28	BENZO [a] ANTH	1.3E-10						NA					
29	BENZO [a] PYRE	9.8E-11						NA					
30	BENZO [b] FLUO	1.1E-10						NA					
31	BENZO [g,h,i]	4.2E-11						NA					
32	BENZO [k] FLUO	8.2E-11						NA					
33	BIS (2-ETHYLHE	1.2E-11						NA					
34	CHRYSENE	1.3E-10						NA					
35	DIBENZ [a,h] A	0.0E+00						NA					
36	FLUORANTHENE	1.9E-10						NA					
37	FLUORENE	3.4E-11						NA					
38	INDENO [1,2,3-	5.0E-11						NA					
39	NAPHTHALENE	1.2E-11						NA					
40	PHENANTHRENE	1.5E-10						NA					
41	PHENOL	0.0E+00						NA					
42	PYRENE	1.7E-10						NA					

43	2,2-BIS (PARA-	6.4E-11		NA				
44	2,2-BIS (PARA-	6.4E-11		NA				
45	2,2-BIS (PARA-	6.4E-11		NA				
46	ALDRIN	0.0E+00		NA				
47	ALPHA CHLORDAN	0.0E+00		NA				
48	BENZALDEHYDE	0.0E+00		NA				
49	BENZOIC ACID	0.0E+00		NA				
50	BETA-ENDOSULFA	0.0E+00		NA				
51	DIELDRIN	6.4E-11		NA				
52	GAMMA-CHLORDAN	0.0E+00		NA				
53	HEPTACHLOR	6.4E-11		NA				
54	HEPTACHLOR EPO	6.4E-11		NA				
55	LINDANE / GAMA	0.0E+00		NA				
56	METHOXYCHLOR	0.0E+00		NA				
57	PCB 1260	6.4E-11		NA				
58	2,4,5-TRICHLOR	0.0E+00		NA				
59	2,4-DICHLOROPH	0.0E+00		NA				
60	2-(2,4,5-TRICH	0.0E+00		NA				
61	TRICHLOROFLUOR	0.0E+00		0E+00				
	PATHWAY SUM (HI)		2E-04	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		2E-04					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP3
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (PG)

		CHRONIC DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	5.0E-09					
3	BERYLLIUM	5.2E-11					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.2E-09					
7	MERCURY	0.0E+00					
8	NICKEL	2.8E-10					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	1.1E-09					
14	ACETONE	4.5E-11					
15	BENZENE	4.5E-11					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	4.5E-11					
18	METHYLISOBUTYL	4.5E-11					
19	TOLUENE	4.5E-11					
20	XYLENES, TOTAL	4.5E-11					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	1.2E-11					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	4.0E-11					
27	ANTHRACENE	5.9E-11					
28	BENZO [a] ANTH	1.3E-10					
29	BENZO [a] PYRE	9.8E-11					
30	BENZO [b] FLUO	1.1E-10					
31	BENZO [g,h,i]	4.2E-11					
32	BENZO [k] FLUO	8.2E-11					
33	BIS (2-ETHYLHE	1.2E-11					
34	CHRYSENE	1.3E-10					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	1.9E-10					
37	FLUORENE	3.4E-11					
38	INDENO [1,2,3-	5.0E-11					
39	NAPHTHALENE	1.2E-11					
40	PHENANTHRENE	1.5E-10					
41	PHENOL	0.0E+00					
42	PYRENE	1.7E-10					

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD (PG)

		CHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	NA	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	5E-05					
3	BERYLLIUM	NA					
4	CADMIUM (FOOD)	NA					
5	CADMIUM (WATER	NA					
6	CHROMIUM	2E-03					
7	MERCURY	0E+00					
8	NICKEL	NA					
9	NITRATE	NA					
10	NITRITE	NA					
11	SILVER	NA					
12	THALLIUM	NA					
13	VANADIUM	NA					
14	ACETONE	NA					
15	BENZENE	NA					
16	CARBON DISULFI	0E+00					
17	ETHYLBENZENE	2E-10					
18	METHYLISOBUTYL	2E-09					
19	TOLUENE	8E-11					
20	XYLENES, TOTAL	5E-10					
21	1,2-DIMETHYLBE	0E+00					
22	1,3-DIMETHYLBE	0E+00					
23	2,4-DIMETHYLPH	NA					
24	2-METHYLNAPHTH	NA					
25	2-METHYLPHENOL	NA					
26	ACENAPHTHENE	NA					
27	ANTHRACENE	NA					
28	BENZO [a] ANTH	NA					
29	BENZO [a] PYRE	NA					
30	BENZO [b] FLUO	NA					
31	BENZO [g,h,i]	NA					
32	BENZO [k] FLUO	NA					
33	BIS (2-ETHYLHE	NA					
34	CHRYSENE	NA					
35	DIBENZ [a,h] A	NA					
36	FLUORANTHENE	NA					
37	FLUORENE	NA					
38	INDENO [1,2,3-	NA					
39	NAPHTHALENE	NA					
40	PHENANTHRENE	NA					
41	PHENOL	NA					
42	PYRENE	NA					

43	2,2-BIS (PARA-	6.4E-11					NA	
44	2,2-BIS (PARA-	6.4E-11					NA	
45	2,2-BIS (PARA-	6.4E-11					NA	
46	ALDRIN	0.0E+00					NA	
47	ALPHA CHLORDAN	0.0E+00					NA	
48	BENZALDEHYDE	0.0E+00					NA	
49	BENZOIC ACID	0.0E+00					NA	
50	BETA-ENDOSULFA	0.0E+00					NA	
51	DIELDRIN	6.4E-11					NA	
52	GAMMA-CHLORDAN	0.0E+00					NA	
53	HEPTACHLOR	6.4E-11					NA	
54	HEPTACHLOR EPO	6.4E-11					NA	
55	LINDANE / GAMA	0.0E+00					NA	
56	METHOXYCHLOR	0.0E+00					NA	
57	PCB 1260	6.4E-11					NA	
58	2,4,5-TRICHLOR	0.0E+00					NA	
59	2,4-DICHLOROPH	0.0E+00					NA	
60	2-(2,4,5-TRICH	0.0E+00					NA	
61	TRICHLOROFLUOR	0.0E+00					0E+00	
	PATHWAY SUM (HI)		2E-03	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		2E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP3
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-CHILD (PG)

		LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	4.3E-10					
3	BERYLLIUM	4.5E-12					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	1.0E-10					
7	MERCURY	0.0E+00					
8	NICKEL	2.4E-11					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	9.1E-11					
14	ACETONE	3.9E-12					
15	BENZENE	3.9E-12					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	3.9E-12					
18	METHYLISOBUTYL	3.9E-12					
19	TOLUENE	3.9E-12					
20	XYLENES, TOTAL	3.9E-12					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	1.1E-12					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	3.4E-12					
27	ANTHRACENE	5.0E-12					
28	BENZO [a] ANTH	1.1E-11					
29	BENZO [a] PYRE	8.5E-12					
30	BENZO [b] FLUO	9.2E-12					
31	BENZO [g,h,i]	3.6E-12					
32	BENZO [k] FLUO	7.1E-12					
33	BIS (2-ETHYLHE	1.1E-12					
34	CHRYSENE	1.1E-11					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	1.6E-11					
37	FLUORENE	3.0E-12					
38	INDENO [1,2,3-	4.3E-12					
39	NAPHTHALENE	1.1E-12					
40	PHENANTHRENE	1.3E-11					
41	PHENOL	0.0E+00					
42	PYRENE	1.5E-11					

LIFETIME RISK SUMMARY

FUTURE
RES-CHILD (PG)

		LIFETIME EXCESS CANCER RISK					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		PIC. GND	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2	BARIUM	NA					
3	BERYLLIUM	4E-11					
4	CADMIUM (FOOD)	0E+00					
5	CADMIUM (WATER	0E+00					
6	CHROMIUM	4E-09					
7	MERCURY	NA					
8	NICKEL	NA					
9	NITRATE	NA					
10	NITRITE	NA					
11	SILVER	NA					
12	THALLIUM	NA					
13	VANADIUM	NA					
14	ACETONE	NA					
15	BENZENE	0E+00					
16	CARBON DISULFI	NA					
17	ETHYLBENZENE	NA					
18	METHYLISOBUTYL	NA					
19	TOLUENE	NA					
20	XYLENES, TOTAL	NA					
21	1,2-DIMETHYLBE	NA					
22	1,3-DIMETHYLBE	NA					
23	2,4-DIMETHYLPH	NA					
24	2-METHYLNAPHTH	NA					
25	2-METHYLPHENOL	NA					
26	ACENAPHTHENE	NA					
27	ANTHRACENE	NA					
28	BENZO [a] ANTH	NA					
29	BENZO [a] PYRE	NA					
30	BENZO [b] FLUO	NA					
31	BENZO [g,h,i]	NA					
32	BENZO [k] FLUO	NA					
33	BIS (2-ETHYLHE	NA					
34	CHRYSENE	NA					
35	DIBENZ [a,h] A	NA					
36	FLUORANTHENE	NA					
37	FLUORENE	NA					
38	INDENO [1,2,3-	NA					
39	NAPHTHALENE	NA					
40	PHENANTHRENE	NA					
41	PHENOL	NA					
42	PYRENE	NA					

43	2,2-BIS (PARA-	5.5E-12	2E-12				
44	2,2-BIS (PARA-	5.5E-12	NA				
45	2,2-BIS (PARA-	5.5E-12	NA				
46	ALDRIN	0.0E+00	0E+00				
47	ALPHA CHLORDAN	0.0E+00	0E+00				
48	BENZALDEHYDE	0.0E+00	NA				
49	BENZOIC-ACID	0.0E+00	NA				
50	BETA-ENDOSULFA	0.0E+00	NA				
51	DIELDRIN	5.5E-12	9E-11				
52	GAMMA-CHLORDAN	0.0E+00	0E+00				
53	HEPTACHLOR	5.5E-12	3E-11				
54	HEPTACHLOR EPO	5.5E-12	5E-11				
55	LINDANE / GAMA	0.0E+00	NA				
56	METHOXYCHLOR	0.0E+00	NA				
57	PCB 1260	5.5E-12	NA				
58	2,4,5-TRICHLOR	0.0E+00	NA				
59	2,4-DICHLOROPH	0.0E+00	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA				
61	TRICHLOROFLUOR	0.0E+00	NA				
	TOTAL PATHWAY CANCER RISK		4E-09	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK		4E-09					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP4
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (BF)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		BALL FIELD	0	0	0	0	0
		AIR-PART	0	0	0	0	0
		INHALATION	0	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.8E-08					
3	BERYLLIUM	1.9E-10					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	4.3E-09					
7	MERCURY	0.0E+00					
8	NICKEL	1.0E-09					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	3.8E-09					
14	ACETONE	1.6E-10					
15	BENZENE	1.6E-10					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	1.6E-10					
18	METHYLISOBUTYL	1.6E-10					
19	TOLUENE	1.6E-10					
20	XYLENES, TOTAL	1.6E-10					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	4.5E-11					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	1.4E-10					
27	ANTHRACENE	2.1E-10					
28	BENZO [a] ANTH	4.5E-10					
29	BENZO [a] PYRE	3.5E-10					
30	BENZO [b] FLUO	3.8E-10					
31	BENZO [g,h,i]	1.5E-10					
32	BENZO [k] FLUO	3.0E-10					
33	BIS (2-ETHYLHE	4.5E-11					
34	CHRYSENE	4.5E-10					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	6.8E-10					
37	FLUORENE	1.2E-10					
38	INDENO [1,2,3-	1.8E-10					
39	NAPHTHALENE	4.5E-11					
40	PHENANTHRENE	5.6E-10					
41	PHENOL	0.0E+00					
42	PYRENE	6.3E-10					

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD (BF)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
BALL FIELD	0	0	0	0	0
AIR-PART	0	0	0	0	0
INHALATION	0	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
NA	0E+00	0E+00	0E+00	0E+00	0E+00
2E-05					
NA					
NA					
NA					
7E-04					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
6E-10					
8E-10					
3E-10					
2E-09					
0E+00					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	2.3E-10			NA			
44	2,2-BIS (PARA-	2.3E-10			NA			
45	2,2-BIS (PARA-	2.3E-10			NA			
46	ALDRIN	0.0E+00			NA			
47	ALPHA CHLORDAN	0.0E+00			NA			
48	BENZALDEHYDE	0.0E+00			NA			
49	BENZOIC ACID	0.0E+00			NA			
50	BETA-ENDOSULFA	0.0E+00			NA			
51	DIELDRIN	2.3E-10			NA			
52	GAMMA-CHLORDAN	0.0E+00			NA			
53	HEPTACHLOR	2.3E-10			NA			
54	HEPTACHLOR EPO	2.3E-10			NA			
55	LINDANE / GAMA	0.0E+00			NA			
56	METHOXYCHLOR	0.0E+00			NA			
57	PCB 1260	2.3E-10			NA			
58	2,4,5-TRICHLOR	0.0E+00			NA			
59	2,4-DICHLOROPH	0.0E+00			NA			
60	2-(2,4,5-TRICH	0.0E+00			NA			
61	TRICHLOROFLUOR	0.0E+00			0E+00			
	PATHWAY SUM (HI)		7E-04	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		7E-04					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP4
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (BF)

CHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 (FROM WS1)	SCENARIO 2 (FROM WS2)	SCENARIO 3 (FROM WS3)	SCENARIO 4 (FROM WS4)	SCENARIO 5 (FROM WS5)	SCENARIO 6 (FROM WS6)
	BALL FIELD	0	0	0	0	0	0
	AIR-PART	0	0	0	0	0	0
	INHALATION	0	0	0	0	0	0
1	ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.8E-08					
3	BERYLLIUM	1.9E-10					
4	CADMIUM (FOOD)	0.0E+00					
5	CADMIUM (WATER	0.0E+00					
6	CHROMIUM	4.3E-09					
7	MERCURY	0.0E+00					
8	NICKEL	1.0E-09					
9	NITRATE	0.0E+00					
10	NITRITE	0.0E+00					
11	SILVER	0.0E+00					
12	THALLIUM	0.0E+00					
13	VANADIUM	3.8E-09					
14	ACETONE	1.6E-10					
15	BENZENE	1.6E-10					
16	CARBON DISULFI	0.0E+00					
17	ETHYLBENZENE	1.6E-10					
18	METHYLISOBUTYL	1.6E-10					
19	TOLUENE	1.6E-10					
20	XYLENES, TOTAL	1.6E-10					
21	1,2-DIMETHYLBE	0.0E+00					
22	1,3-DIMETHYLBE	0.0E+00					
23	2,4-DIMETHYLPH	0.0E+00					
24	2-METHYLNAPHTH	4.5E-11					
25	2-METHYLPHENOL	0.0E+00					
26	ACENAPHTHENE	1.4E-10					
27	ANTHRACENE	2.1E-10					
28	BENZO [a] ANTH	4.5E-10					
29	BENZO [a] PYRE	3.5E-10					
30	BENZO [b] FLUO	3.8E-10					
31	BENZO [g,h,i]	1.5E-10					
32	BENZO [k] FLUO	3.0E-10					
33	BIS (2-ETHYLHE	4.5E-11					
34	CHRYSENE	4.5E-10					
35	DIBENZ [a,h] A	0.0E+00					
36	FLUORANTHENE	6.8E-10					
37	FLUORENE	1.2E-10					
38	INDENO [1,2,3-	1.8E-10					
39	NAPHTHALENE	4.5E-11					
40	PHENANTHRENE	5.6E-10					
41	PHENOL	0.0E+00					
42	PYRENE	6.3E-10					

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD (BF)

CHRONIC HAZARD QUOTIENT

SCENARIO 1 (FROM WS1)	SCENARIO 2 (FROM WS2)	SCENARIO 3 (FROM WS3)	SCENARIO 4 (FROM WS4)	SCENARIO 5 (FROM WS5)	SCENARIO 6 (FROM WS6)
BALL FIELD	0	0	0	0	0
AIR-PART	0	0	0	0	0
INHALATION	0	0	0	0	0
NA	0E+00	0E+00	0E+00	0E+00	0E+00
2E-04					
NA					
NA					
NA					
7E-03					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
0E+00					
6E-10					
8E-09					
3E-10					
2E-09					
0E+00					
0E+00					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					
NA					

43	2,2-BIS (PARA-	2.3E-10					NA	
44	2,2-BIS (PARA-	2.3E-10					NA	
45	2,2-BIS (PARA-	2.3E-10					NA	
46	ALDRIN	0.0E+00					NA	
47	ALPHA CHLORDAN	0.0E+00					NA	
48	BENZALDEHYDE	0.0E+00					NA	
49	BENZOIC ACID	0.0E+00					NA	
50	BETA-ENDOSULFA	0.0E+00					NA	
51	DIELDRIN	2.3E-10					NA	
52	GAMMA-CHLORDAN	0.0E+00					NA	
53	HEPTACHLOR	2.3E-10					NA	
54	HEPTACHLOR EPO	2.3E-10					NA	
55	LINDANE / GAMA	0.0E+00					NA	
56	METHOXYCHLOR	0.0E+00					NA	
57	PCB 1260	2.3E-10					NA	
58	2,4,5-TRICHLOR	0.0E+00					NA	
59	2,4-DICHLOROPH	0.0E+00					NA	
60	2-(2,4,5-TRICH	0.0E+00					NA	
61	TRICHLOROFLUOR	0.0E+00					0E+00	
	PATHWAY SUM (HI)		7E-03	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL		7E-03					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP4
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY — FUTURE — RES-CHILD (BF) | LIFETIME RISK SUMMARY — FUTURE — RES-CHILD (BF)

	LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)						LIFETIME EXCESS CANCER RISK					
	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6	SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
	BALL FIELD	0	0	0	0	0	BALL FIELD	0	0	0	0	0
	AIR-PART	0	0	0	0	0	AIR-PART	0	0	0	0	0
	INHALATION	0	0	0	0	0	INHALATION	0	0	0	0	0
CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1 ARSENIC	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0E+00	0E+00	0E+00	0E+00	0E+00	0E+00
2 BARIUM	1.5E-09						NA					
3 BERYLLIUM	1.6E-11						1E-10					
4 CADMIUM (FOOD)	0.0E+00						0E+00					
5 CADMIUM (WATER	0.0E+00						0E+00					
6 CHROMIUM	3.7E-10						2E-08					
7 MERCURY	0.0E+00						NA					
8 NICKEL	8.7E-11						NA					
9 NITRATE	0.0E+00						NA					
10 NITRITE	0.0E+00						NA					
11 SILVER	0.0E+00						NA					
12 THALLIUM	0.0E+00						NA					
13 VANADIUM	3.2E-10						NA					
14 ACETONE	1.4E-11						NA					
15 BENZENE	1.4E-11						0E+00					
16 CARBON DISULFI	0.0E+00						NA					
17 ETHYLBENZENE	1.4E-11						NA					
18 METHYLISOBUTYL	1.4E-11						NA					
19 TOLUENE	1.4E-11						NA					
20 XYLENES, TOTAL	1.4E-11						NA					
21 1,2-DIMETHYLBE	0.0E+00						NA					
22 1,3-DIMETHYLBE	0.0E+00						NA					
23 2,4-DIMETHYLPH	0.0E+00						NA					
24 2-METHYLNAPHTH	3.8E-12						NA					
25 2-METHYLPHENOL	0.0E+00						NA					
26 ACENAPHTHENE	1.2E-11						NA					
27 ANTHRACENE	1.8E-11						NA					
28 BENZO [a] ANTH	3.9E-11						NA					
29 BENZO [a] PYRE	3.0E-11						NA					
30 BENZO [b] FLUO	3.3E-11						NA					
31 BENZO [g,h,i]	1.3E-11						NA					
32 BENZO [k] FLUO	2.5E-11						NA					
33 BIS (2-ETHYLHE	3.8E-12						NA					
34 CHRYSENE	3.9E-11						NA					
35 DIBENZ [a,h] A	0.0E+00						NA					
36 FLUORANTHENE	5.8E-11						NA					
37 FLUORENE	1.1E-11						NA					
38 INDENO [1,2,3-	1.6E-11						NA					
39 NAPHTHALENE	3.8E-12						NA					
40 PHENANTHRENE	4.8E-11						NA					
41 PHENOL	0.0E+00						NA					
42 PYRENE	5.4E-11						NA					

43	2,2-BIS (PARA-	2.0E-11		7E-12				
44	2,2-BIS (PARA-	2.0E-11		NA				
45	2,2-BIS (PARA-	2.0E-11		NA				
46	ALDRIN	0.0E+00		0E+00				
47	ALPHA CHLORDAN	0.0E+00		0E+00				
48	BENZALDEHYDE	0.0E+00		NA				
49	BENZOIC ACID	0.0E+00		NA				
50	BETA-ENDOSULFA	0.0E+00		NA				
51	DIELDRIN	2.0E-11		3E-10				
52	GAMMA-CHLORDAN	0.0E+00		0E+00				
53	HEPTACHLOR	2.0E-11		9E-11				
54	HEPTACHLOR EPO	2.0E-11		2E-10				
55	LINDANE / GAMA	0.0E+00		NA				
56	METHOXYCHLOR	0.0E+00		NA				
57	PCB 1260	2.0E-11		NA				
58	2,4,5-TRICHLOR	0.0E+00		NA				
59	2,4-DICHLOROPH	0.0E+00		NA				
60	2-(2,4,5-TRICH	0.0E+00		NA				
61	TRICHLOROFLUOR	0.0E+00		NA				
	TOTAL PATHWAY CANCER RISK		2E-08	0E+00	0E+00	0E+00	0E+00	0E+00
	POPULATION TOTAL EXCESS RISK		2E-08					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP5
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (RES)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 RESIDENCE SOIL ORAL (FROM WS1)	SCENARIO 2 RESIDENCE SOIL DERMAL (FROM WS2)	SCENARIO 3 RESIDENCE AIR-VOC INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	6.0E-04	NA	0.0E+00			
3	BERYLLIUM	8.9E-06	NA	0.0E+00			
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00			
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00			
6	CHROMIUM	1.6E-04	NA	0.0E+00			
7	MERCURY	0.0E+00	NA	0.0E+00			
8	NICKEL	1.2E-04	NA	0.0E+00			
9	NITRATE	0.0E+00	NA	0.0E+00			
10	NITRITE	0.0E+00	NA	0.0E+00			
11	SILVER	0.0E+00	NA	0.0E+00			
12	THALLIUM	0.0E+00	NA	0.0E+00			
13	VANADIUM	1.8E-04	NA	0.0E+00			
14	ACETONE	6.9E-06	NA	5.9E-14			
15	BENZENE	6.9E-06	NA	4.1E-16			
16	CARBON DISULFI	0.0E+00	NA	0.0E+00			
17	ETHYLBENZENE	6.9E-06	NA	1.9E-17			
18	METHYLISOBUTYL	6.9E-06	NA	7.6E-18			
19	TOLUENE	6.9E-06	NA	7.6E-17			
20	XYLENES, TOTAL	7.8E-06	NA	2.7E-16			
21	1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00			
22	1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00			
23	2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00			
24	2-METHYLNAPHTH	0.0E+00	NA	0.0E+00			
25	2-METHYLPHENOL	0.0E+00	NA	0.0E+00			
26	ACENAPHTHENE	0.0E+00	NA	0.0E+00			
27	ANTHRACENE	0.0E+00	NA	0.0E+00			
28	BENZO [a] ANTH	0.0E+00	NA	0.0E+00			
29	BENZO [a] PYRE	0.0E+00	NA	0.0E+00			
30	BENZO [b] FLUO	0.0E+00	NA	0.0E+00			
31	BENZO [g,h,i]	0.0E+00	NA	0.0E+00			
32	BENZO [k] FLUO	0.0E+00	NA	0.0E+00			
33	BIS (2-ETHYLHE	3.9E-06	NA	0.0E+00			
34	CHRYSENE	0.0E+00	NA	0.0E+00			
35	DIBENZ [a,h] A	0.0E+00	NA	0.0E+00			
36	FLUORANTHENE	0.0E+00	NA	0.0E+00			
37	FLUORENE	0.0E+00	NA	0.0E+00			
38	INDENO [1,2,3-	0.0E+00	NA	0.0E+00			
39	NAPHTHALENE	0.0E+00	NA	7.0E-19			
40	PHENANTHRENE	0.0E+00	NA	0.0E+00			
41	PHENOL	0.0E+00	NA	0.0E+00			
42	PYRENE	0.0E+00	NA	0.0E+00			

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD (RES)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 RESIDENCE SOIL ORAL (FROM WS1)	SCENARIO 2 RESIDENCE SOIL DERMAL (FROM WS2)	SCENARIO 3 RESIDENCE AIR-VOC INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	NA	0E+00	0E+00	0E+00
9E-03	NA	0E+00			
2E-03	NA	NA			
NA	NA	NA			
NA	NA	NA			
8E-03	NA	0E+00			
0E+00	NA	0E+00			
6E-03	NA	NA			
NA	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
3E-02	NA	NA			
7E-06	NA	NA			
NA	NA	NA			
0E+00	NA	0E+00			
7E-06	NA	0E+00			
1E-05	NA	0E+00			
3E-06	NA	0E+00			
2E-06	NA	0E+00			
0E+00	NA	0E+00			
0E+00	NA	0E+00			
0E+00	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
2E-04	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			

43	2,2-BIS (PARA-	4.2E-06	NA	0.0E+00		8E-03	NA	NA			
44	2,2-BIS (PARA-	3.5E-06	NA	0.0E+00		NA	NA	NA			
45	2,2-BIS (PARA-	3.6E-06	NA	0.0E+00		NA	NA	NA			
46	ALDRIN	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
47	ALPHA CHLORDAN	2.7E-06	NA	0.0E+00		5E-02	NA	NA			
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
49	BENZOIC ACID	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
50	BETA-ENDOSULFA	8.7E-07	NA	0.0E+00		4E-03	NA	NA			
51	DIELDRIN	3.4E-06	NA	0.0E+00		7E-02	NA	NA			
52	GAMMA-CHLORDAN	2.1E-06	NA	0.0E+00		4E-02	NA	NA			
53	HEPTACHLOR	3.4E-06	NA	0.0E+00		7E-03	NA	NA			
54	HEPTACHLOR EPO	0.0E+00	NA	0.0E+00		NA	NA	NA			
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
56	METHOXYCHLOR	1.5E-06	NA	0.0E+00		3E-04	NA	NA			
57	PCB 1260	4.2E-06	2.3E-06	0.0E+00		NA	NA	NA			
58	2,4,5-TRICHLOR	3.9E-08	NA	0.0E+00		4E-07	NA	NA			
59	2,4-DICHLOROPH	1.8E-07	NA	0.0E+00		2E-05	NA	NA			
60	2-(2,4,5-TRICH	4.5E-08	NA	0.0E+00		6E-06	NA	NA			
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00		0E+00	NA	0E+00			
					PATHWAY SUM (HI)	2E-01	0E+00	0E+00	0E+00	0E+00	0E+00
					POPULATION TOTAL	2E-01					

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP5
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (RES)

		CHRONIC DAILY INTAKE (mg/kg/day)					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		RESIDENCE	RESIDENCE	RESIDENCE	0	0	0
		SOIL	SOIL	AIR-VOC	0	0	0
		ORAL	DERMAL	INHALATION	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	6.0E-04	NA	0.0E+00			
3	BERYLLIUM	8.9E-06	NA	0.0E+00			
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00			
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00			
6	CHROMIUM	1.6E-04	NA	0.0E+00			
7	MERCURY	0.0E+00	NA	0.0E+00			
8	NICKEL	1.2E-04	NA	0.0E+00			
9	NITRATE	0.0E+00	NA	0.0E+00			
10	NITRITE	0.0E+00	NA	0.0E+00			
11	SILVER	0.0E+00	NA	0.0E+00			
12	THALLIUM	0.0E+00	NA	0.0E+00			
13	VANADIUM	1.8E-04	NA	0.0E+00			
14	ACETONE	6.9E-06	NA	5.9E-14			
15	BENZENE	6.9E-06	NA	4.1E-16			
16	CARBON DISULFI	0.0E+00	NA	0.0E+00			
17	ETHYLBENZENE	6.9E-06	NA	1.9E-17			
18	METHYLISOBUTYL	6.9E-06	NA	7.6E-18			
19	TOLUENE	6.9E-06	NA	7.6E-17			
20	XYLENES, TOTAL	7.8E-06	NA	2.7E-16			
21	1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00			
22	1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00			
23	2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00			
24	2-METHYLNAPHTH	0.0E+00	NA	0.0E+00			
25	2-METHYLPHENOL	0.0E+00	NA	0.0E+00			
26	ACENAPHTHENE	0.0E+00	NA	0.0E+00			
27	ANTHRACENE	0.0E+00	NA	0.0E+00			
28	BENZO [a] ANTH	0.0E+00	NA	0.0E+00			
29	BENZO [a] PYRE	0.0E+00	NA	0.0E+00			
30	BENZO [b] FLUO	0.0E+00	NA	0.0E+00			
31	BENZO [g,h,i]	0.0E+00	NA	0.0E+00			
32	BENZO [k] FLUO	0.0E+00	NA	0.0E+00			
33	BIS (2-ETHYLHE	3.9E-06	NA	0.0E+00			
34	CHRYSENE	0.0E+00	NA	0.0E+00			
35	DIBENZ [a,h] A	0.0E+00	NA	0.0E+00			
36	FLUORANTHENE	0.0E+00	NA	0.0E+00			
37	FLUORENE	0.0E+00	NA	0.0E+00			
38	INDENO [1,2,3-	0.0E+00	NA	0.0E+00			
39	NAPHTHALENE	0.0E+00	NA	7.0E-19			
40	PHENANTHRENE	0.0E+00	NA	0.0E+00			
41	PHENOL	0.0E+00	NA	0.0E+00			
42	PYRENE	0.0E+00	NA	0.0E+00			

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD (RES)

		CHRONIC HAZARD QUOTIENT					
		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		RESIDENCE	RESIDENCE	RESIDENCE	0	0	0
		SOIL	SOIL	AIR-VOC	0	0	0
		ORAL	DERMAL	INHALATION	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0E+00	NA	NA	0E+00	0E+00	0E+00
2	BARIUM	9E-03	NA	0E+00			
3	BERYLLIUM	2E-03	NA	NA			
4	CADMIUM (FOOD)	0E+00	0E+00	NA			
5	CADMIUM (WATER	0E+00	0E+00	NA			
6	CHROMIUM	3E-02	NA	0E+00			
7	MERCURY	0E+00	NA	0E+00			
8	NICKEL	6E-03	NA	NA			
9	NITRATE	0E+00	NA	NA			
10	NITRITE	0E+00	NA	NA			
11	SILVER	0E+00	NA	NA			
12	THALLIUM	0E+00	NA	NA			
13	VANADIUM	3E-02	NA	NA			
14	ACETONE	7E-05	NA	NA			
15	BENZENE	NA	NA	NA			
16	CARBON DISULFI	0E+00	NA	0E+00			
17	ETHYLBENZENE	7E-05	NA	0E+00			
18	METHYLISOBUTYL	1E-04	NA	0E+00			
19	TOLUENE	3E-05	NA	0E+00			
20	XYLENES, TOTAL	4E-06	NA	0E+00			
21	1,2-DIMETHYLBE	0E+00	NA	0E+00			
22	1,3-DIMETHYLBE	0E+00	NA	0E+00			
23	2,4-DIMETHYLPH	0E+00	NA	NA			
24	2-METHYLNAPHTH	0E+00	NA	NA			
25	2-METHYLPHENOL	0E+00	NA	NA			
26	ACENAPHTHENE	0E+00	NA	NA			
27	ANTHRACENE	0E+00	NA	NA			
28	BENZO [a] ANTH	0E+00	NA	NA			
29	BENZO [a] PYRE	0E+00	NA	NA			
30	BENZO [b] FLUO	0E+00	NA	NA			
31	BENZO [g,h,i]	0E+00	NA	NA			
32	BENZO [k] FLUO	0E+00	NA	NA			
33	BIS (2-ETHYLHE	2E-04	NA	NA			
34	CHRYSENE	0E+00	NA	NA			
35	DIBENZ [a,h] A	0E+00	NA	NA			
36	FLUORANTHENE	0E+00	NA	NA			
37	FLUORENE	0E+00	NA	NA			
38	INDENO [1,2,3-	0E+00	NA	NA			
39	NAPHTHALENE	0E+00	NA	NA			
40	PHENANTHRENE	0E+00	NA	NA			
41	PHENOL	0E+00	NA	NA			
42	PYRENE	0E+00	NA	NA			

43	2,2-BIS (PARA-	4.2E-06	NA	0.0E+00		8E-03	NA	NA			
44	2,2-BIS (PARA-	3.5E-06	NA	0.0E+00		NA	NA	NA			
45	2,2-BIS (PARA-	3.6E-06	NA	0.0E+00		NA	NA	NA			
46	ALDRIN	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
47	ALPHA CHLORDAN	2.7E-06	NA	0.0E+00		5E-02	NA	NA			
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
49	BENZOIC ACID	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
50	BETA-ENDOSULFA	8.7E-07	NA	0.0E+00		2E-02	NA	NA			
51	DIELDRIN	3.4E-06	NA	0.0E+00		7E-02	NA	NA			
52	GAMMA-CHLORDAN	2.1E-06	NA	0.0E+00		4E-02	NA	NA			
53	HEPTACHLOR	3.4E-06	NA	0.0E+00		7E-03	NA	NA			
54	HEPTACHLOR EPO	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
56	METHOXYCHLOR	1.5E-06	NA	0.0E+00		3E-04	NA	NA			
57	PCB 1260	4.2E-06	2.3E-06	0.0E+00		NA	NA	NA			
58	2,4,5-TRICHLOR	3.9E-08	NA	0.0E+00		4E-06	NA	NA			
59	2,4-DICHLOROPH	1.8E-07	NA	0.0E+00		2E-05	NA	NA			
60	2-(2,4,5-TRICH	4.5E-08	NA	0.0E+00		6E-06	NA	NA			
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00		0E+00	NA	0E+00			
					PATHWAY SUM (HI)	3E-01	0E+00	0E+00	0E+00	0E+00	0E+00
					POPULATION TOTAL	3E-01					

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP5
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-CHILD (RES)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 RESIDENCE SOIL ORAL (FROM WS1)	SCENARIO 2 RESIDENCE SOIL DERMAL (FROM WS2)	SCENARIO 3 RESIDENCE AIR-VOC INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	5.1E-05	NA	0.0E+00			
3	BERYLLIUM	7.6E-07	NA	0.0E+00			
4	CADMIUM (FOOD)	0.0E+00	0.0E+00	0.0E+00			
5	CADMIUM (WATER	0.0E+00	0.0E+00	0.0E+00			
6	CHROMIUM	1.4E-05	NA	0.0E+00			
7	MERCURY	0.0E+00	NA	0.0E+00			
8	NICKEL	1.0E-05	NA	0.0E+00			
9	NITRATE	0.0E+00	NA	0.0E+00			
10	NITRITE	0.0E+00	NA	0.0E+00			
11	SILVER	0.0E+00	NA	0.0E+00			
12	THALLIUM	0.0E+00	NA	0.0E+00			
13	VANADIUM	1.5E-05	NA	0.0E+00			
14	ACETONE	5.9E-07	NA	5.2E-15			
15	BENZENE	5.9E-07	NA	3.6E-17			
16	CARBON DISULFI	0.0E+00	NA	0.0E+00			
17	ETHYLBENZENE	5.9E-07	NA	1.7E-18			
18	METHYLISOBUTYL	5.9E-07	NA	6.7E-19			
19	TOLUENE	5.9E-07	NA	6.7E-18			
20	XYLENES, TOTAL	6.6E-07	NA	2.4E-17			
21	1,2-DIMETHYLBE	0.0E+00	NA	0.0E+00			
22	1,3-DIMETHYLBE	0.0E+00	NA	0.0E+00			
23	2,4-DIMETHYLPH	0.0E+00	NA	0.0E+00			
24	2-METHYLNAPHTH	0.0E+00	NA	0.0E+00			
25	2-METHYLPHENOL	0.0E+00	NA	0.0E+00			
26	ACENAPHTHENE	0.0E+00	NA	0.0E+00			
27	ANTHRACENE	0.0E+00	NA	0.0E+00			
28	BENZO [a] ANTH	0.0E+00	NA	0.0E+00			
29	BENZO [a] PYRE	0.0E+00	NA	0.0E+00			
30	BENZO [b] FLUO	0.0E+00	NA	0.0E+00			
31	BENZO [g,h,i]	0.0E+00	NA	0.0E+00			
32	BENZO [k] FLUO	0.0E+00	NA	0.0E+00			
33	BIS (2-ETHYLHE	3.3E-07	NA	0.0E+00			
34	CHRYSENE	0.0E+00	NA	0.0E+00			
35	DIBENZ [a,h] A	0.0E+00	NA	0.0E+00			
36	FLUORANTHENE	0.0E+00	NA	0.0E+00			
37	FLUORENE	0.0E+00	NA	0.0E+00			
38	INDENO [1,2,3-	0.0E+00	NA	0.0E+00			
39	NAPHTHALENE	0.0E+00	NA	6.2E-20			
40	PHENANTHRENE	0.0E+00	NA	0.0E+00			
41	PHENOL	0.0E+00	NA	0.0E+00			
42	PYRENE	0.0E+00	NA	0.0E+00			

LIFETIME RISK SUMMARY

FUTURE
RES-CHILD (RES)

LIFETIME EXCESS CANCER RISK

SCENARIO 1 RESIDENCE SOIL ORAL (FROM WS1)	SCENARIO 2 RESIDENCE SOIL DERMAL (FROM WS2)	SCENARIO 3 RESIDENCE AIR-VOC INHALATION (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
NA	NA	NA			
3E-06	NA	0E+00			
NA	NA	0E+00			
NA	NA	0E+00			
NA	NA	0E+00			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
2E-08	NA	0E+00			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
5E-09	NA	NA			
0E+00	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
NA	NA	NA			
0E+00	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			
NA	NA	NA			

43	2,2-BIS (PARA-	3.6E-07	NA	0.0E+00		1E-07	NA	0E+00			
44	2,2-BIS (PARA-	3.0E-07	NA	0.0E+00		1E-07	NA	NA			
45	2,2-BIS (PARA-	3.1E-07	NA	0.0E+00		7E-08	NA	NA			
46	ALDRIN	0.0E+00	NA	0.0E+00		0E+00	NA	0E+00			
47	ALPHA CHLORDAN	2.3E-07	NA	0.0E+00		3E-07	NA	0E+00			
48	BENZALDEHYDE	0.0E+00	NA	0.0E+00		NA	NA	NA			
49	BENZOIC ACID	0.0E+00	NA	0.0E+00		NA	NA	NA			
50	BETA-ENDOSULFA	7.3E-08	NA	0.0E+00		NA	NA	NA			
51	DIELDRIN	2.9E-07	NA	0.0E+00		5E-06	NA	0E+00			
52	GAMMA-CHLORDAN	1.8E-07	NA	0.0E+00		2E-07	NA	0E+00			
53	HEPTACHLOR	2.9E-07	NA	0.0E+00		1E-06	NA	0E+00			
54	HEPTACHLOR EPO	0.0E+00	NA	0.0E+00		0E+00	NA	0E+00			
55	LINDANE / GAMA	0.0E+00	NA	0.0E+00		0E+00	NA	NA			
56	METHOXYCHLOR	1.2E-07	NA	0.0E+00		NA	NA	NA			
57	PCB 1260	3.6E-07	1.9E-07	0.0E+00		3E-06	1E-06	NA			
58	2,4,5-TRICHLOR	3.3E-09	NA	0.0E+00		NA	NA	NA			
59	2,4-DICHLOROPH	1.5E-08	NA	0.0E+00		NA	NA	NA			
60	2-(2,4,5-TRICH	3.8E-09	NA	0.0E+00		NA	NA	NA			
61	TRICHLOROFLUOR	0.0E+00	NA	0.0E+00		NA	NA	NA			
					TOTAL PATHWAY CANCER RISK	1E-05	1E-06	0E+00	0E+00	0E+00	0E+00
					POPULATION TOTAL EXCESS RISK	1E-05					

RANGE NAME: SSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP6
LAST UPDATED: 06/05/92

SUBCHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (LF)

SUBCHRONIC DAILY INTAKE (mg/kg/day)

	CHEMICAL NAME	SCENARIO 1 LANDFILL SOIL ORAL (FROM WS1)	SCENARIO 2 LANDFILL SOIL DERMAL (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.1E-04	NA				
3	BERYLLIUM	1.7E-06	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	2.0E-05	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	4.9E-06	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	1.9E-05	NA				
14	ACETONE	7.8E-07	NA				
15	BENZENE	7.8E-07	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	7.8E-07	NA				
18	METHYLISOBUTYL	7.8E-07	NA				
19	TOLUENE	7.8E-07	NA				
20	XYLENES, TOTAL	7.8E-07	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	4.3E-07	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	4.3E-07	NA				
27	ANTHRACENE	4.3E-07	NA				
28	BENZO [a] ANTH	2.8E-06	NA				
29	BENZO [a] PYRE	1.1E-06	NA				
30	BENZO [b] FLUO	1.1E-06	NA				
31	BENZO [g,h,i]	5.3E-07	NA				
32	BENZO [k] FLUO	1.1E-06	NA				
33	BIS (2-ETHYLHE	4.3E-07	NA				
34	CHRYSENE	1.4E-06	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	2.5E-06	NA				
37	FLUORENE	4.3E-07	NA				
38	INDENO [1,2,3-	6.7E-07	NA				
39	NAPHTHALENE	4.3E-07	NA				
40	PHENANTHRENE	2.5E-06	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	2.8E-06	NA				

SUBCHRONIC RISK SUMMARY

FUTURE
RES-CHILD (LF)

SUBCHRONIC HAZARD QUOTIENT

SCENARIO 1 LANDFILL SOIL ORAL (FROM WS1)	SCENARIO 2 LANDFILL SOIL DERMAL (FROM WS2)	SCENARIO 3 0 0 0 (FROM WS3)	SCENARIO 4 0 0 0 (FROM WS4)	SCENARIO 5 0 0 0 (FROM WS5)	SCENARIO 6 0 0 0 (FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
2E-03	NA				
3E-04	NA				
NA	NA				
NA	NA				
1E-03	NA				
0E+00	NA				
2E-04	NA				
NA	NA				
NA	NA				
0E+00	NA				
0E+00	NA				
3E-03	NA				
8E-07	NA				
NA	NA				
0E+00	NA				
8E-07	NA				
2E-06	NA				
4E-07	NA				
2E-07	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
1E-06	NA				
NA	NA				
7E-07	NA				
1E-07	NA				
9E-06	NA				
4E-06	NA				
4E-06	NA				
2E-06	NA				
4E-06	NA				
2E-05	NA				
5E-06	NA				
0E+00	NA				
6E-06	NA				
1E-06	NA				
2E-06	NA				
1E-05	NA				
8E-06	NA				
0E+00	NA				
9E-06	NA				

43	2,2-BIS (PARA-	0.0E+00	NA			0E+00	NA				
44	2,2-BIS (PARA-	0.0E+00	NA			NA	NA				
45	2,2-BIS (PARA-	0.0E+00	NA			NA	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	0.0E+00	NA			0E+00	NA				
48	BENZALDEHYDE	0.0E+00	NA			0E+00	NA				
49	BENZOIC ACID	0.0E+00	NA			0E+00	NA				
50	BETA-ENDOSULFA	0.0E+00	NA			0E+00	NA				
51	DIELDRIN	0.0E+00	NA			0E+00	NA				
52	GAMMA-CHLORDAN	0.0E+00	NA			0E+00	NA				
53	HEPTACHLOR	0.0E+00	NA			0E+00	NA				
54	HEPTACHLOR EPO	0.0E+00	NA			NA	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	0.0E+00	NA			0E+00	NA				
57	PCB 1260	0.0E+00	0.0E+00			NA	NA				
58	2,4,5-TRICHLOR	0.0E+00	NA			0E+00	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			0E+00	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			0E+00	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			0E+00	NA				
	PATHWAY SUM (HI)			7E-03	0E+00	0E+00	0E+00	0E+00	0E+00		
	POPULATION TOTAL			7E-03							

RANGE NAME: CSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP6
LAST UPDATED: 06/05/92

CHRONIC EXPOSURE SUMMARY

FUTURE
RES-CHILD (LF)

CHRONIC DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		LANDFILL	LANDFILL	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	1.1E-04	NA				
3	BERYLLIUM	1.7E-06	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	2.0E-05	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	4.9E-06	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	1.9E-05	NA				
14	ACETONE	7.8E-07	NA				
15	BENZENE	7.8E-07	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	7.8E-07	NA				
18	METHYLISOBUTYL	7.8E-07	NA				
19	TOLUENE	7.8E-07	NA				
20	XYLENES, TOTAL	7.8E-07	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	4.3E-07	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	4.3E-07	NA				
27	ANTHRACENE	4.3E-07	NA				
28	BENZO [a] ANTH	2.8E-06	NA				
29	BENZO [a] PYRE	1.1E-06	NA				
30	BENZO [b] FLUO	1.1E-06	NA				
31	BENZO [g,h,i]	5.3E-07	NA				
32	BENZO [k] FLUO	1.1E-06	NA				
33	BIS (2-ETHYLHE	4.3E-07	NA				
34	CHRYSENE	1.4E-06	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	2.5E-06	NA				
37	FLUORENE	4.3E-07	NA				
38	INDENO [1,2,3-	6.7E-07	NA				
39	NAPHTHALENE	4.3E-07	NA				
40	PHENANTHRENE	2.5E-06	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	2.8E-06	NA				

CHRONIC RISK SUMMARY

FUTURE
RES-CHILD (LF)

CHRONIC HAZARD QUOTIENT

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
LANDFILL	LANDFILL	0	0	0	0
SOIL	SOIL	0	0	0	0
ORAL	DERMAL	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
2E-03	NA				
3E-04	NA				
0E+00	0E+00				
0E+00	0E+00				
4E-03	NA				
0E+00	NA				
2E-04	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
3E-03	NA				
8E-06	NA				
NA	NA				
0E+00	NA				
8E-06	NA				
2E-05	NA				
4E-06	NA				
4E-07	NA				
0E+00	NA				
0E+00	NA				
0E+00	NA				
1E-06	NA				
0E+00	NA				
7E-06	NA				
1E-06	NA				
9E-05	NA				
4E-05	NA				
4E-05	NA				
2E-05	NA				
4E-05	NA				
2E-05	NA				
5E-05	NA				
0E+00	NA				
6E-05	NA				
1E-05	NA				
2E-05	NA				
1E-05	NA				
8E-05	NA				
0E+00	NA				
9E-05	NA				

43	2,2-BIS (PARA-	0.0E+00	NA				0E+00	NA			
44	2,2-BIS (PARA-	0.0E+00	NA				NA	NA			
45	2,2-BIS (PARA-	0.0E+00	NA				NA	NA			
46	ALDRIN	0.0E+00	NA				0E+00	NA			
47	ALPHA CHLORDAN	0.0E+00	NA				0E+00	NA			
48	BENZALDEHYDE	0.0E+00	NA				0E+00	NA			
49	BENZOIC ACID	0.0E+00	NA				0E+00	NA			
50	BETA-ENDOSULFA	0.0E+00	NA				0E+00	NA			
51	DIELDRIN	0.0E+00	NA				0E+00	NA			
52	GAMMA-CHLORDAN	0.0E+00	NA				0E+00	NA			
53	HEPTACHLOR	0.0E+00	NA				0E+00	NA			
54	HEPTACHLOR EPO	0.0E+00	NA				0E+00	NA			
55	LINDANE / GAMA	0.0E+00	NA				0E+00	NA			
56	METHOXYCHLOR	0.0E+00	NA				0E+00	NA			
57	PCB 1260	0.0E+00	0.0E+00				NA	NA			
58	2,4,5-TRICHLOR	0.0E+00	NA				0E+00	NA			
59	2,4-DICHLOROPH	0.0E+00	NA				0E+00	NA			
60	2-(2,4,5-TRICH	0.0E+00	NA				0E+00	NA			
61	TRICHLOROFLUOR	0.0E+00	NA				0E+00	NA			
	PATHWAY SUM (HI)			1E-02	0E+00	0E+00	0E+00	0E+00	0E+00		
	POPULATION TOTAL			1E-02							

RANGE NAME: LSUM

SITE NAME: CAMERON STATION
OPERABLE UNIT: DISK 5
FILE NAME: POP6
LAST UPDATED: 06/05/92

LIFETIME EXPOSURE SUMMARY

FUTURE
RES-CHILD (LF)

LIFETIME AVERAGE DAILY INTAKE (mg/kg/day)

		SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
		LANDFILL	LANDFILL	0	0	0	0
		SOIL	SOIL	0	0	0	0
		ORAL	DERMAL	0	0	0	0
	CHEMICAL NAME	(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
1	ARSENIC	0.0E+00	NA	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2	BARIUM	9.0E-06	NA				
3	BERYLLIUM	1.5E-07	NA				
4	CADMIUM (FOOD)	0.0E+00	0.0E+00				
5	CADMIUM (WATER	0.0E+00	0.0E+00				
6	CHROMIUM	1.7E-06	NA				
7	MERCURY	0.0E+00	NA				
8	NICKEL	4.1E-07	NA				
9	NITRATE	0.0E+00	NA				
10	NITRITE	0.0E+00	NA				
11	SILVER	0.0E+00	NA				
12	THALLIUM	0.0E+00	NA				
13	VANADIUM	1.6E-06	NA				
14	ACETONE	6.6E-08	NA				
15	BENZENE	6.6E-08	NA				
16	CARBON DISULFI	0.0E+00	NA				
17	ETHYLBENZENE	6.6E-08	NA				
18	METHYLISOBUTYL	6.6E-08	NA				
19	TOLUENE	6.6E-08	NA				
20	XYLENES, TOTAL	6.6E-08	NA				
21	1,2-DIMETHYLBE	0.0E+00	NA				
22	1,3-DIMETHYLBE	0.0E+00	NA				
23	2,4-DIMETHYLPH	0.0E+00	NA				
24	2-METHYLNAPHTH	3.6E-08	NA				
25	2-METHYLPHENOL	0.0E+00	NA				
26	ACENAPHTHENE	3.6E-08	NA				
27	ANTHRACENE	3.6E-08	NA				
28	BENZO [a] ANTH	2.3E-07	NA				
29	BENZO [a] PYRE	9.4E-08	NA				
30	BENZO [b] FLUO	9.4E-08	NA				
31	BENZO [g,h,i]	4.5E-08	NA				
32	BENZO [k] FLUO	9.4E-08	NA				
33	BIS (2-ETHYLHE	3.6E-08	NA				
34	CHRYSENE	1.2E-07	NA				
35	DIBENZ [a,h] A	0.0E+00	NA				
36	FLUORANTHENE	2.1E-07	NA				
37	FLUORENE	3.6E-08	NA				
38	INDENO [1,2,3-	5.7E-08	NA				
39	NAPHTHALENE	3.6E-08	NA				
40	PHENANTHRENE	2.1E-07	NA				
41	PHENOL	0.0E+00	NA				
42	PYRENE	2.3E-07	NA				

LIFETIME RISK SUMMARY

FUTURE
RES-CHILD (LF)

LIFETIME EXCESS CANCER RISK

SCENARIO 1	SCENARIO 2	SCENARIO 3	SCENARIO 4	SCENARIO 5	SCENARIO 6
LANDFILL	LANDFILL	0	0	0	0
SOIL	SOIL	0	0	0	0
ORAL	DERMAL	0	0	0	0
(FROM WS1)	(FROM WS2)	(FROM WS3)	(FROM WS4)	(FROM WS5)	(FROM WS6)
0E+00	NA	0E+00	0E+00	0E+00	0E+00
NA	NA				
6E-07	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
2E-09	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				
1E-07	NA				
5E-07	NA				
5E-08	NA				
NA	NA				
5E-08	NA				
5E-10	NA				
7E-09	NA				
0E+00	NA				
NA	NA				
NA	NA				
3E-08	NA				
NA	NA				
NA	NA				
NA	NA				
NA	NA				

43	2,2-BIS (PARA-	0.0E+00	NA			0E+00	NA				
44	2,2-BIS (PARA-	0.0E+00	NA			0E+00	NA				
45	2,2-BIS (PARA-	0.0E+00	NA			0E+00	NA				
46	ALDRIN	0.0E+00	NA			0E+00	NA				
47	ALPHA CHLORDAN	0.0E+00	NA			0E+00	NA				
48	BENZALDEHYDE	0.0E+00	NA			NA	NA				
49	BENZOIC ACID	0.0E+00	NA			NA	NA				
50	BETA-ENDOSULFA	0.0E+00	NA			NA	NA				
51	DIELDRIN	0.0E+00	NA			0E+00	NA				
52	GAMMA-CHLORDAN	0.0E+00	NA			0E+00	NA				
53	HEPTACHLOR	0.0E+00	NA			0E+00	NA				
54	HEPTACHLOR EPO	0.0E+00	NA			0E+00	NA				
55	LINDANE / GAMA	0.0E+00	NA			0E+00	NA				
56	METHOXYCHLOR	0.0E+00	NA			NA	NA				
57	PCB 1260	0.0E+00	0.0E+00			0E+00	0E+00				
58	2,4,5-TRICHLOR	0.0E+00	NA			NA	NA				
59	2,4-DICHLOROPH	0.0E+00	NA			NA	NA				
60	2-(2,4,5-TRICH	0.0E+00	NA			NA	NA				
61	TRICHLOROFLUOR	0.0E+00	NA			NA	NA				
				TOTAL PATHWAY CANCER RISK		1E-06	0E+00	0E+00	0E+00	0E+00	0E+00
				POPULATION TOTAL EXCESS RISK		1E-06					

Estimated Cancer Risk from Exposure to Chlorinated Dibenzodioxins and Dibenzofurans

Scenario	Exposed Population	Exposure Point	Dioxin Equiv.[b] Conc., mg/kg	Oral Intake,[c] mg/kg-day	Dermal Intake, mg/kg-day	Inhalation Intake, mg/kg-day	Route-Specific Cancer Risk[a]			Total
							Oral	Dermal	Inhalation	
Current	Child Visitor	Cameron Lake Sediment	1.7E-06	5.3E-15	7.1E-15	NA[d]	7.9E-10	2.7E-09	NA	3E-09
		Cameron Lake Fish	3.0E-06	7.5E-11	NA	NA	1.1E-05	NA	NA	1E-05
									Subtotal	1E-05
Current	Wader	Backlick Run	1.3E-06	1.4E-15	1.1E-14	NA	2.1E-10	3.9E-09	NA	4E-09
Current	Wader	Holmes Run	6.4E-07	7.0E-16	5.2E-15	NA	1.1E-10	1.9E-09	NA	2E-09
Current	Maintenance Worker	Fenceline	1.3E-04	1.4E-12	4.3E-12	NA	2.1E-07	1.6E-06	NA	2E-06

continued-

(a) Oral slope factor, 150,000 (based on administered dose). Dermal slope factor, 375,000 (oral slope factor ÷ 0.4 to convert to absorbed dose (USEPA 1991a). Inhalation slope factor, 150,000.

(b) See text for explanation.

(c) Intake = Concentration * Human Intake Factor (* ABS 0.03, (USEPA 1992b) for dermal only).

(d) Not applicable.

Scenario	Exposed Population	Exposure Point	Dioxin Equiv. Conc., mg/kg	Oral Intake, mg/kg-day	Dermal Intake, mg/kg-day	Inhalation Intake, mg/kg-day	Route-Specific Cancer Risk			Total
							Oral	Dermal	Inhalation	
Future	Child Resident	Yard	4.7E-05	5.2E-11	1.4E-11	NA	7.8E-06	5.2E-06	NA	1E-05
		Cameron Lake Sediment	1.7E-06	5.3E-15	7.1E-15	NA	7.9E-10	2.7E-09	NA	3E-09
		Cameron Lake Fish	3.0E-06	7.5E-11	NA	NA	1.1E-05	NA	NA	1E-05
									Subtotal	2E-05
Future	Adult Resident	Yard	4.7E-05	3.3E-11	4.1E-11	NA	4.9E-06	1.5E-05	NA	2E-05
Future	Construction Worker	Work Area[a]	4.7E-05	3.1E-12	9.9E-13	5.8E-15	4.7E-07	3.7E-07	8.7E-10	8E-07

(a) Future yard and construction work area soil are represented by rail line soils only. Construction site air concentration (1.3E-12 mg/m^3) is product of PM10 air concentration and dioxin equivalent soil concentration.

Risk Calculation for Benzene and Trichloroethylene (TCE)
in Air at Future Yards

Parameter	Units	South Plume Benzene	North Plume TCE
Predicted Air Concentration	mg/m^3	1.2E-10	1.3E-10
Human Intake Factors for Inhalation Route:			
Residential Adult Lifetime	m^3/kg-day	9.4E-02	9.4E-02
Residential Child Lifetime	m^3/kg-day	8.8E-02	8.8E-02
Inhalation Dose:			
Residential Adult Lifetime	mg/kg-day	1.2E-11	1.2E-11
Residential Child Lifetime	mg/kg-day	1.2E-11	1.2E-11
Inhalation Slope Factor	$(mg/kg\text{-}day)^{-1}$	2.9E-02[(a)]	6.0E-03
Cancer Risk Estimates:			
Residential Adult Lifetime	Unitless	3.4E-13	7.4E-14
Residential Child Lifetime	Unitless	3.2E-13	6.9E-14

(a) January 22, 1992 IRIS retrieval.

APPENDIX D

GLOSSARY OF EVALUATION CRITERIA

APPENDIX D
GLOSSARY OF EVALUATION CRITERIA

Overall protection of human health and environment addresses whether or not a remedy provides adequate protection and describes how risks posed through each pathway are eliminated, reduced, or controlled through treatment, engineering controls, or institutional controls.

Compliance with ARARs addresses whether or not a remedy will meet all of the applicable or relevant and appropriate requirements of federal and state environmental statues and/or provide grounds for invoking a waiver.

Long-term effectiveness and permanence refers to the magnitude of residual risk and the ability of a remedy to maintain reliable protection of human health and the environment over time once cleanup goals have been met.

Reduction of toxicity, mobility, or volume through treatment is the anticipated performance of the treatment technologies that may be employed in a remedy.

Short-term effectiveness refers to the period of time with which the remedy achieves protection, as well as the remedy's potential to create adverse impacts on human health and the environment during the construction and implementation period.

Implementability is the technical and administrative feasibility of a remedy, including the availability of materials and services needed to implement the chosen solution.

Cost includes capital, operation and maintenance, and present worth costs.

State acceptance of the preferred alternative will be addressed in the Decision Document after the public comment period ends.

Community acceptance will be addressed in the Decision Document following a review of the public comments received on the RI/FS report and the Proposed Plan.